

Book of
Natural
History.



THE JAGUAR.

BOOK
OF
NATURAL HISTORY;

CONTAINING A DESCRIPTION OF ANIMALS AND BIRDS.

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NATURAL HISTORY.

THE JAGUAR.

THE jaguar is a native of the southern continent of America, being, in fact, the tiger of the new world. In general its colour is as depicted in the plate, but occasionally individuals are found totally black: in these, however, the dark rings still shew through.

According to Sonnini, the celebrated traveller, the jaguar is very expert at climbing trees. "I have seen," he says, "in the forests of Guiana the prints left by the claws of the jaguar on the smooth bark of a tree from forty to fifty feet high, measuring about a foot and a half in circumference, and clothed with branches near its summit alone. It was easy to follow with the eye the efforts which the animal had made to reach the branches. Although his talons had been thrust deeply into the body of the tree, he had met with several slips, but he had always recovered his ground, and, attracted, no doubt, by some favourite object of prey, had at length succeeded in gaining the very top."

The ordinary food of the jaguar consists of horses, oxen, sheep, and dogs, which latter it is said to have been known to enter houses to carry off. Occasionally, when inboldened by hunger, it will even devour men; but, in general, it is a cowardly animal, and of an

indolent disposition. It appears to fast for several days, eating a great quantity when it can, on which it subsists until its appetite again forces it to obtain a fresh supply.

Mr. Fennell, in his very entertaining "History of Quadrupeds," says, with reference to these points, "So long as the jaguar can obtain its customary meals readily, it is indolent and cowardly, secreting itself in the depths of the forests or caverns, and is scared by the most trifling causes; but when imboldened by hunger it will attack man himself. D' Azara says that during his residence at Paraquay, the jaguars killed six men; two of whom were even seized in the night, while sitting by a blazing fire, and carried thence by these animals. Sonnini mentions, that while journeying through the extensive forests of Guiana, he and his party were much annoyed by a jaguar following them in their route, for two successive nights, evading, meanwhile, all their efforts to destroy him. They kept up large blazing fires to frighten him away; and he at length took himself off, after uttering a horrid howl of disappointment. Mr. Maine says that when once the jaguar has tasted human flesh it will hunt for it again."



THE SEARED VULTURE

THE BEARDED VULTURE.

THERE are many kinds of vulture, of which the one before us is among the largest. The vultures are in their way very useful, performing the part of scavengers, and destroying much refuse, which would otherwise, doubtless, become very prejudicial. This has the effect of making themselves unpleasant; but as they enjoy their own life, and are useful to man, it need not be at all regarded.

The chief external mark of difference between the vultures and the eagles is that the heads and necks of the former are bare of feathers. Their eyes also are placed more forward; their claws are less hooked and shorter, not being required for the purpose of grasping or catching their food; the way in which they stand is less upright; their flight is not so swift and powerful; and they are less active and bold in their manners and habits.

The vulture has the faculty of perceiving its food at an extraordinarily great distance, whether through the organ of scent or some other sense entirely unknown to us cannot be determined. Its sight also appears to be very quick. This is thus referred to in the book of Job:—"There is a path which no fowl knoweth, and which the vulture's eye hath not seen."—Job, xxviii. 7. They seem to assemble on a sudden from every quarter of the sky, attracted to their food; and this is alluded to in Isaiah, xxxiv. 15, where it is said, "There shall the vultures also be gathered, every one with her mate." On one occasion it is related that a hog having been

killed by a hunting party in India, it was left on the ground near the tent; within an hour afterwards, the sky being perfectly clear, the attention of one of the company was directed to a dark speck in the air at a vast distance off. While they kept looking at and watching it, by degrees it came nearer and nearer, and increased in apparent size, until they soon perceived that it was a vulture flying in a direct line to the dead animal. In an hour as many as seventy vultures had assembled together at the same spot, drawn together from all quarters to share in the feast.

Again, Mr. Burchell, the celebrated traveller, speaking of the useful part that these birds perform in those hot countries where they are to be found, says, "Vultures have been ordained evidently to perform very necessary and useful duties on the globe; as indeed has every other animated being, however short-sighted we may be as to their utility. To those who have seen these birds, it need not be remarked how well a vulture is adapted to that share in the daily business of the earth which has been allotted to it—that of clearing away putrid matter, which might otherwise taint the air, and produce disease."

THE GNU.



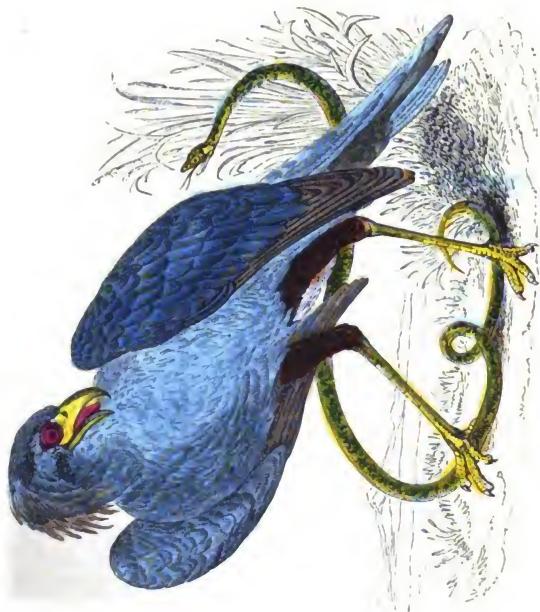
THE GNU.

The gnu is a native of southern Africa, and is known among the Hottentots by the name of 'wilde beaste.' Its habitat is among the mountains to the north of the Cape of Good Hope; where, however, it is rather a rare species.

Barrow observes that "the gnu possesses, in an eminent degree, strength, swiftness, weapons of defence, acute scent, and quick sight. When a herd of gnus are disturbed, they collect together, butt each other with their horns, bound, and perform their various gambols, and then gallop off to a distance. Their motions are extremely free, varied, and always elegant." Pringle, who had abundant opportunities of observing the habits of this singular animal in its native haunts, noticed that, like the common bull and the buffalo, they manifest a natural antipathy to anything of a red or scarlet colour; "and it was one of our amusements," he says, "when approaching them, to hoist a red handkerchief on a pole, and to observe them caper about, lashing their flanks with their long tails, and tearing up the ground with their hoofs, as if they were violently excited, and ready to rush down upon us; and then all at once, when we were about to fire upon them, to see them bound away, and again go prancing round us at a safer distance. When wounded, they are reported to be sometimes rather dangerous to the huntsman; but though we shot several at different times, I never witnessed any instance of this. Once a young one, seemingly a week or two old, whose mother had been shot, followed the huntsman

home, and I attempted to rear it on cow's milk: in a few days it was quite as tame as a common calf, and seemed to be thriving; but it soon sickened and died. I heard, however, of more than one instance in that part of the colony, where the gnu, thus caught young, had been reared with the domestic cattle, and had become so tame as to go regularly out to pasture with the herds, without exhibiting any inclination to resume its natural freedom."

The gnu very closely resembles the common ox, both in appearance and in taste. It is described by Fennell as an extraordinary animal, possessing characters which remind us of the antelope, the buffalo, and the horse. Its full length, from the point of the nose to the end of the tail, is seven feet ten inches, and the height three feet six inches. The body is of a brown colour; on the upper part of the neck is an erect well-defined black and white mane, extending beyond the shoulders; a ridge of black hair, from six inches to a foot in length, extends from the front of the chest, under the fore legs, to the beginning of the belly; a row of black bristly hairs, four inches in length, grows down the middle of the face; and another row of hair, somewhat longer, extends from the under lip to the throat. The forehead is well protected by the rugged roots of the horns that spread across it, leaving only a narrow channel between them; the horns project forwards twelve inches, and then turn in a short curve backwards ten inches; the eyes are surrounded by long white hairs, that radiate and form a kind of star, and under the eye is a slit. The tail is two feet long, white, bristly, and bushy.



THE SECRETARY BIRD

THE SECRETARY BIRD.

THIS singular bird is a native of the deserts of South Africa, where, among tracts of stunted shrubby vegetation, on the extensive sandy plains, skirted by large forests, it takes up its abode, preying upon the deadly snakes, and various reptiles. The secretary has a peculiar method of seizing upon serpents. When approaching them, it always takes care to hold the point of one of its wings before it, in order to parry off their venomous bites: sometimes finding an opportunity of spurning and treading upon the serpent, or else of taking it up on its pinions and throwing it into the air, when, by this method its adversary is tired out; it then kills and swallows it without danger.

Mr. Smith says, "One day I saw a secretary take two or three turns on the wing at a little distance from the place where I was. The bird soon settled, when I saw that it was attentively examining an object near the spot where it had descended. After approaching it with great precaution, the secretary extended one of its wings, which the bird continually agitated. I then discovered a large serpent raising its head, and appearing to wait the approach of the bird to dart upon it; but a quick blow of the wing soon laid it prostrate. The bird appeared to wait for the serpent's raising itself, in order to repeat the blow; but this the serpent, it seems, did not attempt, and the secretary walking towards it, seized it with the feet and bill, and rose into the air, whence the bird let the serpent fall on the ground, so that it might be securely destroyed."

The secretary was so called by the Dutch, from the plumes at the back of its head, which reminded them of the pen stuck behind the ear of the merchant's clerk. These birds live in pairs, and build on high trees, or in dense thickets; the eggs are two in number, as large as those of a goose, and spotted with reddish brown. Their gait is a singular stalk, reminding one of a person moving along on elevated stilts; but they run with great swiftness, and are not easily approached by the sportsman.

It is sometimes kept tame by the colonists of the Cape, mixing with the poultry on a very friendly footing, and rewarding its masters by a continual warfare against the whole tribe of reptiles, rats, locusts, and large insects.



SPOTTED HYENA.

SPOTTED HYÆNA.

THIS animal is very abundant in the south of Africa. In size it is a little smaller than the striped species, but otherwise much resembles it in general appearance. The nose is black, the tail brown and unspotted, the ears large, flat, and rounded, and the general colour of the body a dingy yellow, approaching to a dull brown on the lower parts: the spots are of the latter colour, and they predominate on the upper parts.

The spotted hyæna is called by the Cape colonists, the 'tiger wolf.' It is particularly abundant in their neighbourhood, and a very troublesome neighbour they find it to be. It does not appear that the striped species inhabits the same districts as the spotted one.

It is a general belief that the hyæna cannot be tamed, but this is quite a mistake. It may not, indeed, be possible to tame it after it has grown up, but when young it may easily be tamed. It is often domesticated at the Cape of Good Hope, and is found not only useful for hunting, but capable of becoming faithful and attached to its master. The hyæna is not mentioned by that name in the Holy Bible, but in the passage in the prophet Jeremiah, xii. 9., it is thought by the learned, that the words, 'speckled bird,' should be translated hyæna. It should, in that case, be thus rendered:—

"Mine heritage is unto me as a ravenous hyæna;
Fierce beasts of the desert are round about it."

The hyæna acts the part among animals, that the vulture does among birds; destroying all carrion and

other such substances, which would otherwise be doubtless prejudicial to the health of man. Mr. Pringle says, "In a field of battle in South Africa, no one ever buries the dead; the birds and beasts of prey relieve the living of that trouble: even the bones, except a few of the less manageable parts, find a sepulchre in the voracious maw of the hyæna."

A traveller observes, "The laugh of the hyæna has a startling effect as it steals through the still night, even under our windows, which it approaches in search of food. The power of imitation given to these animals is very great; for they not only cry like the quadrupeds whom they wish to lure within their reach, but they even seem to utter human sounds. The commander of a fortress on the western coast of Africa, assured a lady that for several evenings he had been disturbed at his dinner-hour, by the laughter of the native women, who passed under the walls in search of water. He sent his servant to them, who desired that they might take some other path; and they promised to obey. The next evening, however, the noise was heard again, which highly irritated the commander; and he desired the servant to lie in ambush on the third evening, and rushing suddenly out on them, with a few soldiers, secure the women, and bring them to him in the fortress. The men took their station as ordered; the laughing re-commenced, and out they rushed, when, to their great surprise, they only saw three hyænas standing in the path which had been frequented by the women; and so well counterfeiting their voices, that they could not have been detected but by sight."



THE JAY.

THE JAY.

THE jay is considered one of the handsomest of our British birds; and, certainly, if we omit those which are, properly speaking, foreigners, and only occasionally visit our island, there are few others that can exceed it in plumage.

The general colour of this bird is a reddish brown, darker on the back parts than on the breast. The eye is bright blue, and there is a most brilliant patch of the same colour on the wing. The note, however, of the jay is singularly harsh and grating; and his character is not good, for he is a great thief, and occasionally destroys young game. His principal food however, consists of acorns, nuts, fruits, and various seeds.

Bewick, in his account of this species, says, "When domesticated, they may be rendered very familiar, and will imitate a variety of words and sounds. We have heard one imitate the sound of a saw so exactly, that, though it was on a Sunday, we could hardly be persuaded that there was not a carpenter at work in the house. Another, at the approach of cattle, had learned to hound a cur dog upon them, by whistling and calling his name; at last, during frost, the dog was excited to attack a cow, when the animal fell on the ice, and was hurt: the jay was complained of as a nuisance, and its owner was obliged to destroy it.

They sometimes assemble in great numbers early in the spring, and seem to hold a conference, probably for the purpose of fixing upon the districts they are to occupy: to hear them is truly curious—while some

gabble, shout, or whistle, others with a raucous voice, seem to demand attention: the noise made on these occasions, may be aptly compared to that of a distant meeting of disorderly drunken persons."

"It is remarkable," says Bishop Stanley, "how exactly similar are the habits and propensities of birds of the same tribe or family, though of different species. Thus the jays of North America are of various sorts, entirely differing from our English jays, in parts, or in the whole of their plumage; and yet, in their manners, scarcely a difference is observable. We have before remarked that these and some other birds will just keep out of the range of gun-shot, as if they had learned, either from experience, or by some unknown mode of communication, from their older companions, that provided they never allowed a shooter to come within a given distance, they were quite safe.

But the American jays we are speaking of, have no such knowledge founded upon experience, as is fully proved by the account of an English officer, who was travelling in a very wild unfrequented part of North America, where no gunners had gone before him, and no jay could therefore have ever learned the proper distance to keep, in order to ensure its safety. Yet, there they were, exactly like our common English jays, shy and cautious, as if they had been hunted by sportsmen every day of their lives, keeping at a certain distance, with the occasional clatter and chattering so well known to those who have patiently and perseveringly pursued from copse to copse, or tree to tree, a disturbed party of these cunning birds."

THE INDIAN OX



THE INDIAN OX.

The zebu, or Indian ox, inhabits India, China, the island of Madagascar, the Indian islands, and the eastern side of Africa, from Abyssinia to the Cape of Good Hope.

This animal, frequently known by the name of Brahmin ox, is accounted sacred by the Hindoos, as being dedicated to their false god, Brahmah. They therefore refuse to shed its blood, do not put it to any labour, and the more wealthy people often turn out the calves, on some solemn occasions, as acceptable offerings to Siva, another of their false gods. Bishop Heber says, speaking of these customs, "It would be a mortal sin to strike or injure them. They feed where they please, and devout persons take great pleasure in pampering them. They are great pests in the villages near Calcutta, breaking into gardens, thrusting their noses into the fruiterers' stalls and pastry-cooks' shops, and helping themselves without ceremony. Like other petted animals, they are sometimes mischievous, and are said to resent with a push of their horns, any delay in gratifying their wishes."

Mrs. Barbauld, in one of her entertaining volumes, gives an amusing story of a soldier, who shot a tiger which was in the act of springing on a Brahmin; and so saved his life. The Brahmin expressed great gratitude for the friendly help he had received, and begged to know what he could do in return. "I am very hungry," said the soldier, "you have some nice cows here—I should like a slice of beef." The Brahmin stood aghast at the idea of slaying one of the sacred animals:—

"What! I kill the sacred cows of Brahmah!" "Then kill the next tiger yourself," said the soldier.

"Zoologists," says Fennell, "from Linnæus to Bennett, have regarded this animal as merely a variety of the common ox; but its differences are so great and so many, that, if taken in the aggregate, they offer strong proofs of its specific distinction. Mr. Ogilby justly remarks that "narrow high withers, surmounted by a large fat hump, an arched back rising at the haunches, and suddenly falling at the root of the tail, slender limbs, a large pendulous dewlap falling in folds, long pendant ears, and a peculiarly mild expression of the eye, distinguish the zebu oxen—a race varying in size from that of our largest cattle, to that of a young calf. In the sculptures in the cavern temples of Ellora, in the carvings of the seven Pagodas at Mahamalaipur, on the Coromandel coast and in many other ancient relics, there are very faithful and spirited representations of the zebu oxen; which prove that these animals possessed, at least two thousand years before the Christian era, the same peculiarities which now distinguish them. The religious writings of India state the cow to have been the first dumb animal that was created."

How utterly debased must the human mind be, when it can worship the creature rather than the Creator, "God over all blessed for ever."



THE BULLFINCH.

THE BULLFINCH.

THIS is a tolerably common species of British bird, being found in all the wooded parts of the country. It is much valued as a song bird by those who keep birds in cages; but the true lover of nature prefers to hear them in their free state, enjoying themselves in the open air of Heaven, and gladdening all around them by their cheerful songs.

The bullfinch, at least the male bird, is extremely handsome, as will appear from the following description: the female too, though plainly dressed, is neat and elegant:—The upper part of the head, a ring round the bill, and the origin of the neck is of a remarkably fine glossy jet black, from which, in many parts of the country, it is called the ‘monk’ or ‘pope;’ and in Scotland, not inappropriately, the ‘coal-hood,’ or ‘coally-hood.’ The back is a very pretty ash grey, and the breast a most beautiful red; the wings and tail, bright black.

The female is like the male, but that the red colour is changed for a brown, and none of her colours are so bright. This species not unfrequently changes its plumage: some have been seen entirely white; and there is one of these varieties in the British Museum. Others become wholly black in confinement, but this appears to be from their having been fed with hemp-seed, which seems to have this curious effect upon them.

This bird is not only common in every part of our island, but also throughout the whole of the continent of Europe. “Its usual haunts, during summer, are woods and thickets; but in winter, it approaches nearer to

cultivated grounds, and feeds on seeds, winter berries, etc. In the spring it frequents gardens, where it is usefully busy in destroying the worms which are lodged in the tender buds. The female makes her nest in bushes: it is composed chiefly of moss. She lays five or six eggs, of a dull bluish white, marked at the larger end with dark spots. In the wild state its note is very simple, but when kept in a cage, its song, though in an under subdued tone, is far from being unpleasant. Both male and female may be taught to whistle a variety of tunes. They are frequently imported into this country from Germany, where they are taught to articulate with great distinctness, several words."

Sir William Parsons, who was himself a great musician, has recorded an interesting story of one of these birds. When he was a young man he had a piping bullfinch, which had been taught to sing 'God save the King.' Having occasion to go abroad, he left the bullfinch in charge of his sister, with strict injunction to take the greatest possible care of it. On his return, he at once visited his sister, when she told him that his favourite little bird had been for some time in feeble and declining health, and at that very time was extremely ill. Sir William, much concerned for it, went to the room where the cage was, and having opened the door, put his hand in, and spoke to the bird. It remembered his voice, shook its feathers, hopped faintly on to his finger, piped for the last time, like a loyal bird, as it must have been, 'God save the King,' and immediately after fell down dead.



THE CIVET.

THE CIVET.

THERE are several species of civet, and they are natives of Africa; as also, according to some authors, of Asia. They are very voracious animals, resembling the cat tribe more than any other, in their carnivorous propensities, which they follow out by night in a sanguinary manner. They also resemble them in their eyes, which are capable of being contracted from a circle almost into a line. The feet have five toes, which are partly retractile, and are more or less raised in walking.

The common civet is between two and three feet in length, besides the tail, which is nearly half the length of the body. The hair on the back to the end of the tail is very long, forming on the upper part of the former a sort of mane, which the creature has the power of raising or depressing at pleasure.

The colour of the civet is a brownish grey, interspersed with many transverse interrupted bands, of a blackish or dusky colour.

In its wild state it is naturally ferocious, living, as it does, by rapine. It is extremely nimble and agile, pouncing on the small birds and animals, which are its food: it surprises them at night, as does the cat, in preference to attacking them openly by day: it has been known to carry off poultry from the farm-yard. The voice of the civet resembles that of an angry dog.

In Holland, numbers of these animals are kept for the sake of the drug procured from them, and which therefore goes by their name. The civet thus produced in Amsterdam, is esteemed more highly than that which

is imported from the Levant, or India; being considered to be less adulterated. It sells for as much as two pounds ten shillings an ounce, on the average; but, like camphor, and other such articles, is liable to fluctuations in value. This drug used, in former times, to be much valued as a medicine, but, at present, it is chiefly made use of for imparting its scent to different pomades. It has sometimes been confounded with musk, but in its odour it more resembles amber. Its medicinal properties also are somewhat different. It used also to be thought to have a soothing effect upon the mind; and in Shakspeare's time it was thought indispensable to the toilet.



THE CROWNED PIGEON.

THE CROWNED PIGEON.

THIS remarkable and beautiful bird is a native of Java, New Guinea, and the Moluccas. In size it exceeds a large fowl, measuring, in total length, twenty-eight inches. Several living specimens have been brought to this country, some of which have been kept in the menagerie of the Zoological Society. In its manners it resembles poultry, and walks about with firm and stately steps, and with its beautiful crest expanded. In India and the islands it is sometimes kept tame in the court-yards among other poultry; and Sir George Staunton, in his "Embassy to China," notices it under the title of 'crown bird,' and states that it is very familiar. Its voice, though plaintive, is loud and sonorous; and the cooing of the male is said to be accompanied by a noise somewhat like the 'gobble' of a turkey-cock.

By the Dutch it is frequently brought to Europe from the East Indian possessions, but being of a delicate constitution, and not able to bear the cold, it seldom long survives in the damp and chill temperature of Holland. In consequence, all attempts to domesticate or render it available in the poultry yard in cold climates, have hitherto failed, which is greatly to be regretted, not more on account of its beauty and stately appearance, than for its excellent flavour as a wholesome and nutritious food.

This bird is stated to build its nest in trees, the eggs being two in number. Its food consists of grain and berries.

The nest of the pigeon, built in trees, is little more

than a flat platform of twigs, laid crossways over each other, the lower layer consisting of larger twigs, the uppermost smaller and finer; and on this platform, which varies in thickness, the eggs are laid. Some species, as the rock-dove, the origin of our domestic race, breed in the holes and on the shelves of precipitous rocks, making a bed of a few sticks and twigs. The female lays twice or thrice a year, and generally two eggs at a time, on which she sits alternately with the male, who takes her place for several hours during the day while she is absent in search of food. When the young are first hatched, they are unfledged and blind, and consequently unable to provide for themselves. This task the parents fulfil, disgorging a portion of their half-digested food into the mouths of their nestlings, over whom they watch with the most unremitting attention.

In Persia, and other parts of the East, pigeons are kept in multitudes, for the sake of the manure produced: towers are built on the outskirts of the towns for them, and vast clouds of these birds may be seen coming from them, returning to them, or wheeling in the air round their pinnacles.



THE SQUIRREL.

THE SQUIRREL.

THIS is a well-known little animal, and common in all parts of the country in which large fir woods are to be found. Its agility is very great, and extremely interesting to witness, jumping, as it does, from bough to bough, with the most unerring certainty. Even if it were by some extraordinary chance to miss its hold of the bough it aimed at, it would be sure to catch hold of another long before it reached the ground, and would suffer no inconvenience or hurt by its slip. Its long bushy tail, generally curled up over its back, gives it a singular appearance; and it is a very pretty sight to see it thus sitting upright on the branch of a tree, and holding a nut in its fore paws to nibble at. It is also very alert on the ground, and runs fast: it then generally carries its tail straight behind it.

Squirrels are easily tamed, and are often kept in cages, to which is attached a circular or oblong wire part, which it turns round and round by running on. It is, however, a great pity to keep this or any other harmless wild animal in such confinement. How much better to see them in their natural state, in which alone they can be seen to advantage, and in which alone they can enjoy themselves!

The length of the squirrel, from the end of the nose to the tip of the tail, is about one foot two inches and three quarters on the average. The tail itself is about eight inches and a half long. The whole of the back and sides is of a reddish brown colour, and the under parts white; the ears are terminated by a tuft of hair.

Mr. Blyth has observed of the squirrel, that "in summer its fur is coarse, shining, and of a bright rufous colour, and the ears are deficient of the ornamental tufts, which grow in autumn, while the animal is renovating its coat, and continue, usually, till about the beginning of July; the time varying somewhat in different individuals. In winter, its fur is much finer in quality and texture, considerably longer, thicker and more glossy, and nearly of a greyish brown hue. The first young ones, which are produced very early in the season, push forth the winter garb, which, I believe, they retain throughout the summer; whereas, the second race of young ones, which, for the most part, make their appearance about midsummer, are first clad in the summer dress, which is exchanged before they have become half-grown for that of winter."

Varieties of the squirrel are of not very rare occurrence. One is mentioned by Blumenbach, of a black colour, and also another, which was spotted with black and white; and an albino, which had red eyes. Pennant, the British Naturalist, has said that in Wales there is a variety with a 'cream-coloured tail.' So also the Rev. W. Herbert relates that in North Hampshire, many squirrels have 'white tails;' and Mr. Jesse, the author of the "Gleanings in Natural History," mentions that several such have been observed in the park of Stanford Court, in Worcestershire, the seat of Sir Thomas Winnington, Bart.; also in that of Sir R. Phillips, in Pembrokeshire; and that one with a 'grey tail' was shot at Pain's Hill, near Cobham, in Surrey.



THE TOUCAN.

THE TOUCAN.

THIS family of birds is particularly distinguished by the enormous size of the bill, which in some of the species is nearly as long and as large as the body itself, but is light, filled with cells, and the edge irregularly notched. The tongue is also of a very singular form, being long, narrow, and barbed at the tip. The toucans are only found in tropical America, where they live in small flocks, in the recesses of the forests. They subsist on fruits and insects, and during the nesting season, on the eggs and young of other birds. Their feet are rather short, their wings of moderate length, and their tail rather long, which, when the bird is at rest, it commonly holds erect. They nestle in the trunks of trees, and generally produce two pure white eggs, of a round form.

In the first volume of the "Zoological [Journal," is an interesting account of a toucan, which was kept in a state of domestication in this country for many years. "As the dusk of the evening approached, he finished his last meal for the day; took a few turns, as if for exercise after his meal, round the perches of his cage, and then settled on the highest perch, disposing himself in a sleeping posture, almost at the moment he alighted on it; his head drawn in between his shoulders, and his tail turned vertically over his back."

We are told in Mr. Edward's entertaining "Voyage up the Amazon," that there are many varieties of toucans appearing there at different seasons, but the red-billed and the ariel are the largest and most abundant, seen

at every season, and towards autumn particularly, in vast numbers throughout the forest. Their large beaks give them a very awkward appearance, more especially when flying; yet in the trees they use them with as much apparent ease as though they were to our eyes of a more convenient form. Alighted on a tree, one usually acts the part of a sentinel, uttering constantly the loud cry — *Tucáno*, whence they derive their name. The others disperse over the branches, climbing about by aid of their beaks, and seize the fruit. We had been told that these birds were in the habit of tossing up their food to a considerable distance, and catching it as it fell; but as far as we could observe, they merely threw back the head, allowing the fruit to fall down the throat. We saw at different times tamed toucans, and they never were seen to toss their food, although almost invariably throwing back the head. This habit is rendered necessary by the length of the bill, and the stiffness of the tongue, which prevents their eating as do other birds. All the time while feeding, a hoarse chattering is kept up, and at intervals they unite with the noisy sentry, and scream a concert that may be heard a mile. Having appeased their appetites, they fly towards the deeper forest, and quietly doze away the noon. Often in the very early morning, a few of them may be seen sitting silently upon the branches of some dead tree, apparently awaiting the coming sunlight before starting for their feeding-trees. Toucans, when tamed, are exceedingly familiar, playful birds, capable of learning as many feats as any of the parrots, with the exception of talking. When turning about on their perch, they effect their object by one sudden jump. They eat almost anything, but are particularly fond of meat."



GIBBON.

GIBBON.

THE monkey tribe is divided into the three principal divisions of apes, baboons, and monkeys, and as the distinctions between them are frequently, and indeed most commonly lost sight of, I introduce the following observations of Mr. Fennell on the subject:—"The terms ape, monkey, and baboon, are very indiscriminately applied to quadrumanous or four-handed animals, by the generality of writers; but here, as in all other matters of science, it is very important that some precision in nomenclature should be observed. I shall therefore, as I proceed, particularize some of the most obvious characters by which apes may be readily distinguished from the other two groups.

The apes have neither tails nor cheek-pouches; organs which are, separately, absent, or nearly so, in some baboons and monkeys, but not absent altogether. Another very great distinction consists in the peculiar circumstance of their arms being disproportionately long in comparison with the legs: the arms of some species being so long indeed, that when standing upright, they can touch the ground with the fingers. They are most admirably adapted for a life among woods and forests, and they climb and swing from tree to tree with astonishing facility.

In a state of nature they feed on wild fruits, bulbous roots, small reptiles, insects, birds, and eggs; but in confinement, they will eat cooked beef or mutton. In the latter state their favourite beverage is milk or water; and though at first they reject wine or spirits, yet, like

the savages of America and Australia, they soon lay aside the habits of temperance, and learn to enjoy stimulating drinks."

In the Tower Menagerie, now broken up, there was a large specimen of an animal of this genus "which exhibited an extraordinary resemblance to humanity in form, appearance, and manners. The right arm especially might have been at first sight mistaken for that of a brawny blacksmith or pugilist, had it not been for its hairy covering, and the somewhat unusual length of the fingers. His attentions to a dog which used to visit his cage, were in the best style of dignified patronage: nor did the dog recognise any difference between the pat of his hand, and that of a man. Like many dignified folks, however, his habits were not very refined, and his greatest enjoyment consisted in immoderate potations of porter. Indeed his *porter* carried him to his *bier*, for he died from excessive drinking, in the year 1828."



GOLDEN ORIOLE.

GOLDEN ORIOLE.

THERE are different species of oriole, but this is the only one which is ever found in these kingdoms, and it only very rarely; but a few instances are on record of its having found its way across the Channel. In France, this bird is not uncommon, and it breeds there. The nest is of a curious shape, being somewhat in the form of a purse; it is fastened to the outermost branches of tall trees, placed in the cleft between two, and is composed of stalks and fibres of hemp or straw, or the fine dry stalks of grass, and lined with moss and other soft materials. The female is strongly attached to her eggs and young, and will, it is said, suffer herself to be taken off the nest sooner than leave them.

The golden oriole is about the size of a thrush, being about nine inches and a half in length. The bill is brownish red; the iris or eye, red. The general colour of the plumage is a bright golden yellow, whence the obvious name of the bird: there is a streak of black between the bill and the eye. The quill feathers of the wing are black, overhung with some of the yellow of the back, and there is a patch of the same in the middle of the wing: the two centre feathers of the tail are black, inclining at the base to olive; the tips yellow; of the remainder, the basal half is black, the rest yellow; the legs lead-colour; the claws black.

The note of this species is in general loud and shrill, but Bechstein, the author of the "Cage Birds," says that two young ones which he had, were able, in addition to their usual song, the one to whistle a fanfare,

and the other a minuet; and he considered the tones of their voice to be very melodious and agreeable.

According to the same author also, in Germany these birds usually resort to the outskirts of the forest, where they haunt the umbrageous recesses of the underwood among old and lofty trees, in which it is naturally difficult to see or disturb them. In the summer time they repair to the orchards and gardens, where they feast upon the cherries. In the month of August they migrate from thence in families, and return again to the scene of their birth in the following May.



POLAR BEAR.

POLAR BEAR.

OF the bear there are three kinds; the common brown bear, found among the Alps, and in other parts of Europe; the black bear of North America, which is smaller in size; and the huge Greenland, white, or polar bear.

The last-named species feed on fish, seals, and dead whales, which abound in those Arctic regions which are their native country. Their flesh consequently is rank and unpleasant, but of the other kind, the hams are considered good eating, and even a delicacy.

When our sailors first land upon the unfrequented shores of some of those extreme northern countries, where perhaps the foot of man has never trodden before, the white bears come to gaze upon them in a sort of ignorant astonishment; but they soon become but too well acquainted with the destructive nature of the fire-arms they carry; and if wounded, they either endeavour to fly, or make a desperate resistance, until finally overpowered by the superior force and skill of their assailants. "It often happens, that when a Greenlander and his wife are paddling out at sea, by coming too near an ice floe, a white bear unexpectedly jumps into their boat, and if he does not upset it, sits calmly down, and like a passenger suffers himself to be rowed along. It is probable that the poor little Greenlander is not very fond of his new guest; however he makes a virtue of necessity, and hospitably rows him to shore."

One would naturally be disposed to imagine that the bear, or any other warm-blooded animal, would suffer from the cold in the dreadfully severe climate which

prevails in those dreary regions of perpetual ice and snow in which his lot is cast; but it is far from being so: he seems to rejoice in the winter when he is surrounded on all sides by ice; and those which have been brought alive to this country, captured when young, suffer only from any degree of heat or warmth; and it is very pleasing to see them diving into the water placed for their recreation, and indeed for the support of their life, for without it they would soon perish; gambolling in it like kittens, and amusing themselves with every possible contortion of their bodies in the element which is so congenial to them, and in which they are so perfectly at home.

It is curious to the observer of nature, to see how different is the kind of food preferred by different animals, even of the same genus. Thus the polar bear, as before observed, feeds on the products of the ocean, and is fond of fish; the brown bear feeds on both animals and vegetables; he is fond of sweet fruits, and also of honey, but it is said that when he is surfeited with the sweetness of it, he rectifies the taste by taking a mouthful of ants, which are extremely acid and pungent.



WREN.

THIS well-known bird is one of the least of those which inhabit our country, weighing only about two drachms and a quarter. Its length is about four inches and a quarter; the bill is about half an inch in length, or a little over, slightly curved, and of a dusky brown colour; the eye is dark brown; all the upper parts of the body, as also the head and the neck, are of a deep russet brown, thickly, but faintly, marked with transverse dusky lines: over the eye is a light-coloured streak. The tail is dusky brown; the feathers of the wing are of the same colour; the under parts are light rufous brown; the sides the same, but crossed with darker lines; the under tail coverts, obscurely spotted with black and white, and the legs pale brown.

The wren is a constant resident in England, and is a general favourite, somewhat in the same way as the robin and the swallow. In the winter, when the snow is deep, they not unfrequently are found dead, the cold, and the difficulty of procuring food being fatal to them. They retire for warmth to the eaves of hay and corn stacks, and any sheltered place.

The wren builds generally in ivy, but also in various other situations, such as trees, bushes, and the thatch of cottages. The nest is composed of hay or moss, and is lined with feathers. The eggs are seven or eight in number, and, as may be supposed, very small, weighing only twenty grains; they are white, dotted with red, chiefly at the thicker end.

“The flight of the wren is performed in a straight

line, fluttering incessantly its short rounded wings. It seldom performs any longer flight than from bush to bush, or across an open grass-plot, and usually near the ground, as if conscious of its imperfect powers.

The wren sings occasionally at all seasons, but least in the autumn. Early in the spring, its lively song may be heard suddenly to break forth in a clear and cheerful strain. Its voice is very strong for so small a bird, more than equalling in strength that of the redbreast. It appears usually to sing one stated succession of notes, or at most, exhibits but little variety. In the performance of its song, the whole body of the little vocalist vibrates, the bill is raised and opened wide, the throat enlarged, and the wings drooping. While singing, the little bird frequently sits on the upper branch of a hedge or bush, and when the song is ended, precipitately descends.

"To shew," says Meyer, "how small in bodily substance this little bird is, we mention the following fact:—We once captured a wren, and wishing to observe its manners, designed to keep it for a few days, in a large wire cage. Accordingly, we introduced the little creature in at the door: it had scarcely released itself from our hand, when we heard it strike itself against a window at the other end of the room. Hardly believing that it could so readily have escaped through the wires of the cage, we repeated the experiment: the result was the same, and we found that this little creature could fly through a cage, whose wires were placed at the distance of only five lines, or little more than the third of an inch from one another, without appearing to be even obstructed by them."

PECCARY.



PECCARY.

THERE are two species of peccary, the white-lipped and the collared. Both kinds inhabit the vast forests of South America, and, although they are alike in some respects, resorting for shelter to the burrows that other animals have forsaken, or to the hollows of trees, yet, in others of their habits, and in their disposition, they widely differ, as well as in their external appearance.

The white-lipped peccary is considerably larger than the other species, frequently measuring three feet and a half in length, and sometimes attaining the weight of a hundred pounds. In form and proportions it is thicker and stouter, with shorter legs and a longer snout: its colour is also darker. The hairs on the body are black, with a few brownish rings, which are most conspicuous about the head. The whole of the under lip, the sides of the mouth, and nose, are white, whence the name; and the mane and hair about the head are so long as nearly to conceal the ears.

The length of the collared peccary is about three feet, but some are not quite so long; the weight is about fifty pounds.

The white-lipped peccaries congregate in numerous bands, sometimes amounting, it is said, to more than a thousand. It will fight courageously with beasts of prey. The jaguar is its mortal enemy, and frequently loses its life in engaging a number of these animals, which assist each other, and surround their enemy. M. de la Borde relates that being one day engaged with some others in hunting a drove of peccaries, they were surrounded by

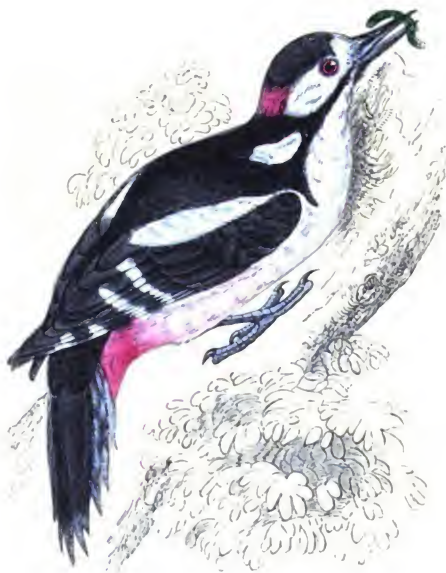
them, and obliged to take refuge upon a piece of rock; and, notwithstanding they kept up a constant fire among them, the creatures did not retire till a great number of them were killed.

The food of the peccaries consists of bulbous and other roots, in search of which they turn up the ground; and are also fond of sugar-canes, potatoes, maize, and manihot, among which they often commit great damage. They also eat fish and reptiles, which they are said to be expert in catching, and to be more than a match even for the deadly rattlesnake.

These animals emit a strong scent, considered by some to resemble musk, and to be pleasant; but by others to be very disagreeable, which is not extraordinary, considering that many persons are extremely fond of the smell of musk itself, while others cannot bear it; and on some it produces very powerful effects.

"The females of both species produce only two young ones in a year. If a young one be captured, it will become nearly as tame and familiar in confinement as the common hog, but its flesh is said to be inferior to pork in flavour and fatness, and to partake of the strong smell, unless the gland has been removed immediately after death."

How wonderful indeed are the various endowments with which God has gifted His creatures, many of them obvious to us as to their utility, but others often entirely hidden from us as to any such, yet, doubtless, all useful to their possessors in some way or degree or other. How far would even the idea of many of them be from coming into our thoughts, if not presented to us in the way that they are.



WOODPECKER

WOODPECKER.

THERE are a great variety of species of woodpecker, but only four or five are natives of this country: all are curious and handsome birds, and some of them extremely beautiful. The habits of all of them are alike, and their name is descriptive of what one may call the distinguishing trait in their character. The largest kind that is found in Great Britain, excepting, indeed, the great black woodpecker, which is, however, an extremely rare bird, is the green woodpecker, a very handsome species, and not uncommon in some parts of the country. It is otherwise called the woodspite, poppinjay, ecle, hew-hole, and various other vernacular names.

The following is the account given by Montagu:—
“The formation of the whole of this tribe is admirably adapted to their mode of life. The bill, which is strong, and formed like a wedge at the point, enables them to force their way through the sap of a tree, when, by instinct, it is discovered to be decayed at the heart. With this instrument it dislodges the larvæ of a numerous tribe of the coleopterous insects, as well as that of the goat moth. The tongue is no less wonderfully formed, for insinuating into all the smaller crevices, to extract the hidden treasures, by transfixing the larger insects, or, by adhesion withdrawing the smaller; for, like the wryneck, it is furnished with a glutinous substance for that purpose. Nor can we less admire the short and strong formation of the legs, and the hooked claws, so well calculated to enable them to climb and affix themselves against the body of a tree, either to roost, or

perforate a hole; to assist which, the stiff tail is of infinite use.

Woodpeckers are commonly seen climbing up a tree, but never down, as some have asserted. The hole which they make is as perfect a circle as if described by a pair of compasses. For the places of nidification, the softer woods are attacked, the elm, ash, and, particularly the aspen, but rarely the oak. These are only perforated where they have symptoms of decay; and the excavations are frequently deep, to give security to their eggs. This species lays four or five white eggs, weighing about two drachms, which are placed on the rotten wood, without any nest. The young birds have the appearance of crimson on their heads, but not so bright as in adults.

Ants and their eggs are a favourite repast of this species, for which they are frequently seen on the ground searching the emmet hills. The tongue is here made use of instead of the bill, similar to that of the wryneck. Its note is harsh, and its manner of flying undulated."



THIBET DOG.

THIBET DOG.

THE first traveller that appears to have given to the public any account of these dogs, is Captain Turner, who says that while near the seat of the Rajah of Bootan, he noticed "a row of wooden cages, containing a number of large dogs, tremendously fierce, strong, and noisy. They were natives of Thibet; and whether savage by nature, or soured by confinement, they were so impetuously furious, that it was unsafe, unless the keepers were near, even to approach their dens. Entering a Thibet village, and being indolently disposed, and prompted by mere curiosity, I strolled alone among the houses, and seeing everything still and quiet, I turned into one of the stone enclosures, which serve as folds for cattle. The instant I entered the gate, to my astonishment, up started a huge dog, big enough, if his courage had been equal to his size, to fight a lion. He kept me at bay with a most clamorous bark, and I was a good deal startled at first, but recollecting their cowardly disposition, I stood still; for having once had one in my possession, I knew that they were fierce only when they perceived themselves feared. If I had attempted to run, he probably would have flown upon me, and torn me in pieces, before any one could have come to my rescue. Some persons came out of the house, and he was soon silenced."

His late Majesty, King William the Fourth, presented a pair of dogs of this kind, to the collection in the Gardens of the Zoological Society in the Regents Park, London. They had been brought from the neighbour-

hood of Diggarchee, the capital city of Thibet, by Dr. Wallich, the celebrated botanist. They were larger than the largest English mastiff. "Their colour was a deep black, slightly clouded on the sides; their feet, and a spot over each eye alone, being of a full, tawny, or bright brown. They had the broad, short, truncated muzzle of the mastiff, and lips still more deeply pendulous. In fact, there appeared, throughout, a general looseness of the skin; a circumstance which M. Desmarest has pointed out as characteristic of his 'dog of Thibet,' of which, however, he gives no particular description." Speaking of this same pair Dr. Wallich says, that they were very gentle; and he further writes of them that "these noble animals are the watch-dogs of the table land of the Himalayan Mountains about Thibet. Their masters, the Bhoteas, to whom they are most strongly attached, are a singular race, of a ruddy copper-colour, indicating the bracing air which they breathe; rather short, but of an excellent disposition. Their clothing is adapted to the cold climate which they inhabit, and consists of fur and woollen cloth. The men till the ground and keep sheep, and at certain seasons come down to trade, bringing borax, tincal, and musk, for sale: they sometimes penetrate as far as Calcutta. On these occasions the women remain at home with the dogs, and the encampment is watched by the latter, which have an almost irreconcilable aversion to Europeans, and in general fly ferociously at a white face:" out of their own immediate country, however, they seem, as imparted by the previous statement, to lose nearly all their energies, and to degenerate very much.



TROGON.

TROGON.

No species of this beautiful family of birds occurs in this country, or even in Europe. The following account of them is necessarily borrowed:—"The trogons," says Linnæus Martin, "constitute a family of birds, the members of which are peculiar to the hotter regions of America, and of India, and its adjacent islands—Ceylon, Java, Borneo, Sumatra, etc.; one species only having as yet been discovered in Africa. Among the most conspicuous of the feathered tribes for beauty and brilliancy of plumage, the trogons stand confessedly pre-eminent. The metallic golden green of some species is of dazzling effulgence; in others less gorgeous: the delicate pencillings of the plumage, and the contrasted hues of deep scarlet, black, green, and brown, produce a rich and beautiful effect.

It is difficult to convey the idea of a bird, or indeed of any natural object, by description solely; the pictorial specimen, however, will render the details connected with the family features of the present group easily intelligible.

The trogons are zygodactyle, that is, they have their toes in pairs—two before, and two behind, like the parrots and woodpeckers; the tarsi are short and feeble, the beak is stout, and the gape wide; the general contour of the body is full and round, and the head large; the plumage is dense, soft, and deep; the wings are short but pointed, the quill feathers being rigid; the tail is long, ample, and graduated, its outer feathers decreasing in length; in some species the tail feathers are elongated, so as to form a pendent plumage of loose feathers.

Of solitary habits, the trogons, (or courocoucs,) frequent the most secluded portions of dense forests, remote from the abodes of man. For hours together they sit motionless on some branch, uttering occasionally, a plaintive, melancholy cry, especially while the female is brooding on her eggs. Indifferent during the day to every object, listless or slumbering on their perch, they take no notice of the presence of an intruder, and may indeed be often so closely approached as to be knocked down by a stick. The bright glare of the sun obscures their sight, and they wait for evening, the dusk of twilight being their season of activity.

Fruits, insects and their larvæ, constitute their food. Formed, most of them at least, for rapid but not protracted flight, they watch from their perch the insects flitting by, and dart after them with surprising velocity, returning after their short chase to the same point of observation. Some, however, are almost exclusively frugivorous. Many species are certainly migratory.

Like the parrots and woodpeckers, the trogons breed in the hollows of decayed trees, the eggs being deposited on a bed of wood-dust, the work of insects; they are three or four in number, and white. The young, when first hatched, are totally destitute of feathers, which do not begin to make their appearance for two or three days; and their head and back appear to be disproportionately large. These birds are said to rear two broods in the year."



CHINCHILLA.

CHINCHILLA.

THE chinchilla is well known by name, being that little animal whose peculiarly soft fur is so much used for making tippets, and other articles of winter wearing apparel for ladies. Great numbers of skins are imported into England every year, for the manufacture of these; and great numbers of chinchillas are therefore killed, for the supply of this and other countries. The fur, as Father Acosta observes, in his "Natural and Moral Historie of the East and West Indies," translated by D. G., London, 1664, (the original edition was written in Spanish, and published at Barcelona, in the year 1591,) being "so wonderful smooth and soft, that the natives wear the skin as a healthful thing to comfort the stomach, and those parts that have need of a moderate heat." According to Schmidtmeier's "Travels into Chili, over the Andes," London, 1824, in its wild state onions constitute the chief food of this little animal; but those specimens which have been brought to England, have thriven well upon several other kinds of food, such as hay, clover, various kinds of grain, and succulent roots, such as potatoes, parsnips, turnips, and carrots.

"The chinchilla inhabits the alpine valleys of Chili and Peru. Its length from the nose to the end of the tail is about one foot two inches. It is greyish or ash-colour above, and paler on the under parts; all the feet have four toes, and short claws, which are nearly hidden by bristly hairs.

It usually sits upon its haunches, but can raise itself up and stand on its hind feet." "When feeding, it sits

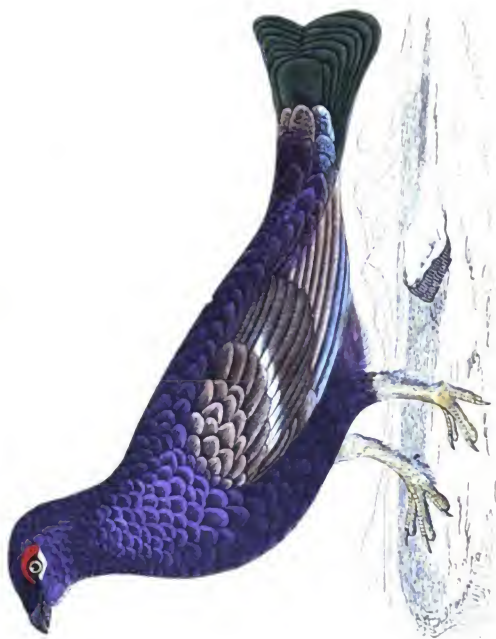
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up, and conveys the food to its mouth with its paws."

Another member of the chinchilla family, the viscacha, commonly lives in communities on the naked rocks, where a dry and scanty vegetation is rarely to be seen. They quit their abodes, which are amongst the loose pieces of rock, shortly after sunrise, and rather before sunset; and then display the most extraordinary activity, leaping from rock to rock; in a moment, as it appears, they may be seen to ascend an almost precipitous rock of twenty or thirty feet in height; and if fired at, they disappear as if by magic, having retreated to the holes and crevices. The sunshine they generally avoid, and it is therefore only in shaded spots that they are seen, unless the day be cloudy. Their food consists of grasses, dry roots, and mosses, and to procure this, they often have to wander far from their homes.

The viscacha has one very singular habit; namely, dragging every hard object to the mouth of its burrows. Around each group of holes many bones of cattle, stones, thistle stalks, and other things, are collected into a heap, which frequently amounts to as much as would fill a wheelbarrow. A gentleman, when riding on a dark night, dropped his watch; he returned in the morning, and by searching in the neighbourhood of every viscacha hole on the line of road, as he expected, soon found it. This habit of picking up whatever may be lying on the ground near its habitation, must cost much trouble. For what purpose it is done it is impossible to conjecture: it cannot be for defence, as the rubbish is placed above the mouth of the burrow, which enters the ground at a very small inclination.



GROUSE.

GROUSE.

THERE are several species of grouse, three or four of which inhabit Great Britain. Of these the red grouse, otherwise called the moor-game, or moor-fowl, is peculiar to these islands, being found, so far as is known, in no other part of the world. It is a thoroughly wild and game bird, never approaching the habitations of man, but inhabiting the most desolate parts of the country—the wild and dreary moors and mountains, where alone it finds the berries on which it subsists. Nevertheless, when kept in confinement, they have been known to lay eggs and bring out their young.

“In severe winters,” says Rennie, “moor-game comes lower down the mountains in Scotland, and they flock together in prodigious numbers: in 1782 and 1783, according to Thornton, three or four thousand assembled. The same author, in his “Sporting Marches,” encamped at the source of the Dalmon, at the foot of an immense hill, called Croke Franc. “The game on those moors,” says he, “is innumerable. In a mile long, and not half a one broad, I saw at least one thousand brace of moor-game.”

“The mountains of Wales are now the most southern parts these birds are found in; they are not uncommon in Yorkshire, and from thence northward upon the moorlands, but nowhere so plentiful as in the Highlands of Scotland, where the moors are unbounded.

It is also found on the Western Islands, and in the mountains and bogs in Ireland; but it is remarkable that these birds should seem to be confined to these

kingdoms. Linnæus did not seem to be acquainted with the species, and Gmelin has given it as a variety of the ptarmigan. Buffon speaks of a white variety, which he names *L'Altagas blanc*, and says it is found about the mountains of Switzerland, and those of Vicenza. But there is little doubt this is the ptarmigan.

The moor-fowl never resort to woods, but confine themselves wholly to the open moors, building their nests, if a few withered stems placed carelessly together deserve that appellation, in a tuft of heath; they feed on the mountain and bog berries, and, in defect of these, on the tops of the heath.

It lays from eight to fourteen eggs, much like those of the black cock, but smaller. The young keep with the parent birds till towards winter, and are called a pack or brood; in November they flock together in great numbers, sometimes thirty or forty, where they are plentiful, at which time they are extremely shy, and difficult to be shot.

We never remember but one instance of its being found at a distance from the moors. This was a female, taken alive near Wedhampton, in Wiltshire, in the winter of 1794, and communicated by the late Edward Poore, Esq., who shewed us a part of the bird. By what unaccountable accident it should have been driven to so great a distance from its native moors, is difficult to say, as the nearest place to this which they are known to inhabit, is the south of Wales, a distance, in a straight line, not less than sixty miles."



HEDGE-HOG.

HEDGE-HOG.

THE hedge-hog is not uncommon in England, but is fast becoming far less frequent than in former times, owing to the spread of cultivation, which naturally destroys the shelter otherwise afforded to wild animals.

The following account of this harmless and inoffensive little animal, is given by Mr. Fennell:—"The hedge-hog inhabits most of the temperate countries of Europe. It is found throughout England; in Donegal, and probably other counties of Ireland. Mr. George Duncan says it is found in Renfrewshire, in Scotland; but a well-known newspaper, edited by a Scotchman, stated, some few years ago, that the hedge-hog is seldom seen so far north as Elgin, and then only in caravans."

"It is about eleven inches long, from the nose to the end of the tail, which is so concealed by its spines or bristles, as to be scarcely visible; the whole upper part of its body and sides are closely covered with strong sharp-pointed spines of an inch in length; its mouth is small, but well furnished with teeth; its eyes are small, and placed high in the head; and its ears are short, broad, and rounded. Dr. Farrar says, that many sportsmen and gamekeepers have assured him that the hedge-hog's sense of hearing is very acute; but adds, that when they have been closely pressed, as to whether or not its alarms are received through the organs of vision or hearing, they seem doubtful. Mr. John Denson, Sen., says, however, that one evening, when his hedge-hog was running about the room, his clock commenced striking the hour, and with considerable intervals between each stroke. At

the sound of the first stroke the hedge-hog contracted itself, as if in fear; before the next stroke was sounded the hedge-hog had partly relaxed itself; but at the sound of the stroke it again contracted; and so on with the successive strokes.

The hedge-hog generally lies concealed during the day, among the grass or fallen leaves at the bottom of hedge-rows or thickets, which it leaves at night for the purpose of seeking food and society. Shakspeare, whose immortal works are replete with zoological observations, is probably the first writer who notices that the hedge-hog utters a whining cry at night-time:—

“When they shewed me this abhorred pit,
They told me here, at dead time of the night,
Ten thousand ————— urchins,
Would make such fearful and confused cries,
As any mortal body hearing it,
Should straight fall mad, or else die suddenly.”

(TITUS ANDRONICUS, ii. 3.)

And he makes one of the witches in Macbeth (iv. 1,) remark that “the hedge-pig whines” at midnight. This appears to be correct, for persons who have kept tame hedge-hogs, assure me that they run about at night uttering sharp cries: and Mr. Denson says he has been informed that the wild ones also whine by night, frequently and at short intervals, and so audibly as to alarm the lonely pedestrian, who may be unfamiliar with its voice. When assailed by enemies, the hedge-hog erects its sharp and formidable prickles, and by means of very powerful muscles it clasps its extremities closely together in the shape of a ball, only exposing to view such parts of its body as are well protected.”



DIPPER.

DIPPER.

THIS interesting little bird is found in the most secluded parts of the country, being attached to the mountain streams, which furnish it with retirement and with food. The following is the description of the bird:—“The bill is three-quarters of an inch long, nearly straight, and black; the upper mandible a little turned down at the points; irides, hazel; upper part of the head and neck, deep brown; the eyelids, chin, fore part of the neck, and breast, white; beneath which is a band of rufous brown; the rest of the upper parts, the belly, vent, and tail, are black; the tail much shorter than is usual in the thrushes.

This species is a retired and solitary bird, rarely seen but on the banks of rapid rocky rivers, or streams of water, particularly in the mountainous parts, as in Scotland and Wales: it is not unfrequent in Devonshire.

In these places it breeds, and continues the whole year. The nest is very large, formed of moss and water-plants externally, and lined with dry oak leaves: in shape it resembles that of the wren, but is not so deep, with a dome or covering: it is usually placed in some mossy bank impending the water, in which situation we have frequently found it. The eggs are five or six in number, of a semi-transparent white: the tinge of bluish colour which they are said to have, is occasioned by the yolk, and disappears when they are blown. They are considerably less than those of the blackbird; their weight being rather more than one drachm.

A pair of these birds, which had for many years built

under a small wooden bridge in Caermarthenshire, we found had made a nest early in May: it was taken, but had no eggs, although the bird flew out of it at the time. In a fortnight after, they had completed another nest in the same place, containing five eggs, which was taken; and in a month after, we took a third nest under the same bridge, with four eggs; undoubtedly the work of the same birds, as no others were seen about that part. At the time the last nest was taken the female was sitting, and the instant she quitted her nest she plunged into the water, and disappeared for a length of time; at last she emerged at a considerable distance down the stream. At another time we found a nest of this bird in a steep projecting bank, over a rivulet clothed with moss: the nest was so well adapted to the surrounding materials, that nothing but the old bird flying in with a fish in its bill, would have led to a discovery. The young were nearly full-feathered, but incapable of flight; and the moment the nest was disturbed, they fluttered out and dropped into the water, and to our astonishment instantly vanished, but in a little time made their appearance at some distance down the stream; and it was with difficulty two out of five were taken, as they dived on being approached."



PACA.

PACA.

THIS animal inhabits the forests in the whole of the eastern division of South America, from Surinam to Paraguay, and formerly existed in some of the West India Islands.

They inhabit burrows, which they excavate, but so superficially, that they are apt to give way beneath the foot of a person passing over them, no less to his annoyance than that of the animal, which thus suddenly finds itself in open daylight. These burrows have, as it is asserted, three openings, which the animal conceals with dry leaves and branches. In order to capture the paca alive, the hunter stops two of these apertures, and proceeds to work at the third, till he arrives at the chamber to which the avenues lead. Driven to an extremity the paca makes a desperate resistance, often inflicting very severe wounds.

When not disturbed, the paca often sits up and washes its head and whiskers with its two fore paws, like a cat. Though heavy and corpulent, it can run with a good deal of activity, and often takes lively jumps. It swims and dives with great adroitness, and its cry resembles the grunting of a young pig. The pacas are very cleanly creatures in all their habits, and keep their underground dwelling in a state of the utmost purity.

Cuvier observes that when the paca is offended, it throws itself violently at the object which has displeased it, and then makes a kind of grumbling, which at length breaks out into a sort of bark. The greater part of the day it passes in repose, delighting in a soft bed, which it forms of



straw, hay, and similar materials, collecting the materials with its mouth, and making a little heap, in the centre of which it lies down. M. Buffon gives a detailed account of one of these animals, which he kept alive in his house for some time, and which was gentle and very familiar.

Its general colour is dusky, with a deeper shade on the back, and a tinge of greyish white on the under parts. From the shoulders to the haunches extend four or five longitudinal rows of oblong whitish spots.

It eats herbs and fruits principally, but the sugar plantations occasionally suffer from its devastations. The damage it commits is partly recompensed, however, by the savoury dish afforded by its flesh, which is a staple article of food in many parts of South America.



GYRFALCON.

GYR-FALCON.

THIS is one of the largest and handsomest of the British species of falcon, and being a very spirited bird, was formerly in great esteem in the art of hawking. When young, the plumage is beautifully mottled with black and white, but old birds become entirely white.

The gyr, or jer-falcon, is a very rare bird in this country, and is only met with as a straggler; it is therefore as much prized now, when dead, as an addition to the museum, as it was, in ancient times, when living, for the falconer's use.

The range of the jer-falcon seems to be the more northern districts of Europe and America. Iceland was, and is, one of its famed strongholds—the capital, so far as the sporting world was concerned—and furnished at a large amount, the sorts which were in most esteem in the countries where this ancient sport was pursued. It spreads also along the precipitous coasts of Norway and Sweden, Greenland, and all those ranges of ice-bound shores which verge upon the Arctic latitudes. Dr. Richardson mentions it as a constant resident in the Hudson Bay territories, and has ascertained it reaching as far south as fifty-two degrees; and Mr. Audubon found several pairs breeding on the coast of Labrador. In Britain an occasional specimen is killed, and, perhaps, finds its way to some public or private collection. Thus, in England, it is extremely rare, and north of the Tweed almost as much so; even in Orkney and Shetland Mr. Lowe considers it as a visitor, and we are not aware of any instance of the nest being found. It is equally

so in Ireland, the late John Templeton records a single specimen; and a letter addressed to Mr. Thompson, of Belfast, so late as February, 1837, from J. Stewart, Esq., mentions a specimen killed in a rabbit-warren close to Dunfanaghy. It is truly a northern and maritime species, maritime, most probably, from the abundance of food which is generally found around the rocky shores of its principal range—the breeding resort of numberless sea-fowl.

The manners, flight, and cry, approach very closely to those of the peregrine; it is even a more daring bird, and, like it, delights to have its eyrie on some precipitous cliff, overhanging the sea. The nest, according to Mr. Audubon, is composed of sticks, sea-weeds, and mosses, but the eggs seem not yet authentically known, though we have some descriptions of them as resembling those of the ptarmigan. Upon any one approaching the nest, it becomes very clamorous, descending on the aggressor in sudden swoops. Dr. Richardson writes, "A pair of these birds attacked me as I was climbing in the vicinity of their nest, built on a lofty precipice, on the borders of Point Lake. They flew in circles, uttering loud cries and harsh screams, and alternately stooping with such velocity, that their motion through the air produced a loud rustling noise: they thrust their claws within an inch or two of my head."

Their food is both the small animals and sea-fowl in their vicinity, but they also make more extended excursions inland, where the grouse and other game form a favourite and much sought-after repast; and, in the fur countries, they follow the partial migrations of the ptarmigan.



TWO-HORNED RHINOCEROS.

TWO-HORNED RHINOCEROS.

THERE are, in all, seven or eight species of the animals of this genus; three of them natives of Asia, and, either three or four, of Africa.

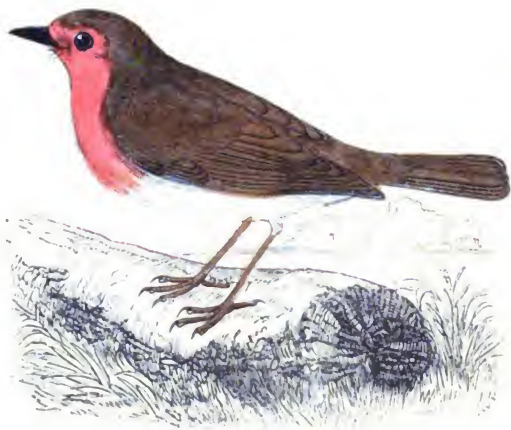
When full-grown, the length of this creature is about twelve feet, and it is of about the same circumference. Its colour is a dark greyish brown, and its hide is extremely thick and hard, resembling the rough bark of a tree. In the "Account of the Menageries," we find the following statement respecting it:—"The rhinoceros is more rapid in its movements than its comparatively clumsy and massive appearance would, at first sight, induce one to expect." "The Onamese," Lieutenant White tells us, "speak with great energy of its irresistible strength and velocity. Speaking of this animal one day to the viceroy, he observed, 'you now see him here before you in Saigon,' and snapping his fingers, 'now he is in Canjeo.'"

However hyperbolical these accounts appear to be, we may yet infer from them, that the rhinoceros can exert great strength and speed. In a state of nature the rhinoceros leads a calm but indolent life; sluggish in habitual movements, he wanders along with a heavy measured step, carrying his huge head low, so that his nose almost touches the ground, and stopping at intervals to uproot, with his horns, some favourite food, or in playful wantonness to plough up the ground, throwing the mud and stones behind him. As he passes through the tangled coverts, every obstacle gives way before his strength, and his track is said to be often marked by

a line of devastation in his rear. Inoffensive, but fearless, he is, when roused, a most tremendous antagonist; and such is the keenness of his sense of smell and hearing, that except by very cautiously approaching him against the direction of the wind, it is almost impossible to take him by surprise. On being thus disturbed, he usually endeavours to retreat in peace, though instances are on record in which he has furiously advanced to the attack.

"A few years ago," says the translator of "Cuvier's Animal Kingdom," "a party of Europeans, with their native attendants and elephants, went out to hunt rhinoceroses, and met with a herd of seven, led as it seemed, by one larger and stronger than the rest. When the large rhinoceros charged the hunters, the leading elephants, instead of using their tusks, which in ordinary cases they are ready enough to do, wheeled round, and received the blow of the rhinoceros's horn upon their posteriors; the blow brought them immediately to the ground with their riders, and as soon as they had risen the brute was again ready, and again brought them down; and in this manner did the contest continue, until four out of the seven were killed, when the rest made good their retreat."

We are not to infer from this account that there is a natural antipathy between the elephant and the rhinoceros, though Pliny asserts such to be the case, an error rejected by other writers. The fact is, that there are seasons in which the rhinoceros becomes excessively furious, and upon any animal large enough to attract his notice, which intrudes within the precincts of its haunt, he rushes with impetuous violence.



REDBREAST.

REDBREAST.

THIS well-known and familiar bird is a universal favourite, not only in this country, but also, it appears, in others. He seems to have comparatively but little dread of man, and comes so near his dwelling, nay, sometimes, indeed, into it, that his confidence demands some return of kind feeling, and this is for the most part accorded to him. Among themselves, however, robins are very quarrelsome, and are pugnacious against many other birds. Rennie observes, "The statement given in most books of natural history, that the redbreast during summer, flies from the habitation of man, which he has haunted during winter, to nestle in wild and solitary places, is far from being strictly correct. I readily admit that many of these birds may be found in woods and forests, but I am equally certain that a great number do not go farther from their winter haunts than the nearest hedge-row. Even in the vicinity of London, in Copenhagen fields, Chelsea, Battersea fields, Kennington, Bermondsey, Peckham, Deptford, Greenwich, wherever indeed there is a field and a few trees, I have heard redbreasts singing during the whole summer: one has been in song all the summer, not a gunshot from my house at Lee, where this paragraph was written; and I have remarked another singing for several months, among some elms at Lewisham Bridge, though there are houses all around, and the bustle of the public road just below.

The redbreast does not indeed usually come to the cottage for crumbs during summer, because then insects

are plentiful, and this may have given rise to the common opinion. I once saw an instance, however, at Compton Bassett, in Wiltshire, in which a redbreast made a daily visit, in summer, within a cottage door, to peck up what he could find. It is worthy of remark, that Grahame's poetical sketch of the redbreast is much more true to nature than the statements of our professed naturalists:—"

"High is his perch but humble is his home
And well concealed, sometimes within the sound
Of heartsome mill clack, where the spacious door,
White dusted, tells him plenty reigns around;
Close at the root of brier bush that o'erhangs
The narrow stream, with shealings white,
He fixes his abode, and lives at will;
Oft near some single cottage he prefers
To rear his little home; there pert and spruce
He shares the refuse of the good wife's churn;
Nor seldom does he neighbour the low roof
Where tiny elves are taught."

The redbreast is a very early builder, and usually selects for its nest a shallow cavity among grass or moss in a bank, or at the root of a tree; sometimes in the hole of a tree, in a wood or secluded lane, frequently far distant from its winter haunts, about the cottage door or the farm-yard.



LLAMA

LLAMA.

ONLY two species of the genus *Auchenia*, peculiar to South America, are now found wild, namely the huanaco or guanaco, and the vicugna. They inhabit, in numerous herds, the lofty Cordilleras; their range extending considerably below the line of perpetual snow; and it is remarkable that they do not inhabit Quito, Santa Fe, Caraccas, etc., although the climate of the mountains in those parts is like that of high Peru, where they live and multiply abundantly, the llama and alpaca are not found in a wild state, and are only known as beasts of burden employed by the Peruvians. Hernandez speaks of llamas in New Spain, Mexico, but there they are scarce, and only kept as curiosities, and neither of the wild species extends its range to that distance.

Into Chili the alpaca was probably introduced, and it is the only species the country possesses. The llama is the largest, strongest, and stoutest species, and anciently was the most valuable beast of burden the Peruvians possessed. Its ordinary height is from four to four feet and a half, sometimes five feet. It is generally light brown, but sometimes dun, grey, or even inclined to purple, and very seldom black or party-coloured; under the belly it is uniformly white. The hair is long, of a texture between silk and wool, but not curled. The alpaca is less than the llama, its ordinary height being four feet. It appears twice as corpulent, owing to its possessing a much longer and more profuse clothing of hair, which is sometimes from eight to twelve inches in length on the sides, rump, and breast. It partakes

of more colours, is often party-coloured, and more frequently white than the three other species.

The Peruvians are careful not to overload either of these animals, whose burden is generally one hundred pounds weight, though for a short distance, on good roads, they occasionally carry twelve or fifteen pounds more. They are usually gentle and willing. If provoked they express their anger by turning back their ears, and spitting into the face of their offender, even if he be four yards off. Their food is never prepared for them, but when unemployed, they are suffered to graze on their native mountains, often pasturing in the company of the wild species; but they are so much accustomed and apparently attached to mankind, that they never exchange servitude for freedom. They very seldom drink for weeks or even months together, and only a little, being mostly satisfied with the moisture they express from their green food; and it even exceeds the camel in its abstinence and endurance of thirst. The voice of the llama resembles the shrill neighing of the horse.

The long silky hair of all the species, but more especially that of the alpaca, is spun into blankets, friezes, and coarse woollens, which are warm and durable, and admit of a good dye. As it is perfectly clean, and free from smell, it does not require any preparatory process with Fuller's earth. The flesh of all the species is eaten. Owing to a scarcity of fire-wood, the dung is used as a substitute for fuel, in the mountain cottages and mines, and it emits a clear, strong, and lively flame."



CROSSBILL.

CROSSBILL.

THE crossbill is a bird that is not commonly seen in this country, owing to its frequenting woods, when it comes among us, but, nevertheless, it may be met with every year, and sometimes in large numbers in various parts of the kingdom. That they have done so in ancient times, as well as in modern, is evident from the following statement in Matthew Paris:—"In 1254, in the fruit season, certain wonderful birds, which had never before been seen in England, appeared, chiefly in the orchards. They were a little bigger than larks, and ate the pippins of the apples, but no other part of them, on which account they were extremely prejudicial, as they deprived the trees of their fruit. They had the points of the beak crossed, by which they divided the apples, as with a forceps or knife."

The crossbill is a singular bird, about the size of a lark, but rather more bulky, and remarkable for the peculiar construction of its bill, both mandibles having hooked points, and the lower crossing the left side of the other. The muscles on the right side, for closing the lower jaw. Dr. Fleming remarks, are much larger than those on the left—a singular example of compensation for the loss of power occasioned by the oblique position and motion of the lower jaw.

The general colour of the body is a reddish orange, which changes with age into a yellow and ashy hue; the tail is forked, and, with the wings, is of a dusky shade. It breeds early in spring, in the north of Europe, in the pine forests, fixing its nest in the clefts of the branches,

and has four or five greenish grey eggs, with a circle of brown spots or rays at the larger end. Its food consists chiefly of the seeds of the fir, which it extracts from the pine cones with great dexterity; and it is said that it will divide an apple with one stroke of its bill, to get at the seeds. It has been tamed, and its motions in a cage resemble those of a parrot, climbing from the lower to the upper bars by means of its bill.

In North America, while sojourning in their winter quarters, they appear in large flocks, feeding on the seeds of the hemlock and white pine; have a loud, sharp, and not unmusical note; chatter as they fly; alight during the prevalence of deep snows before the door of the hunter, and around the house, picking off the clay with which the logs are plastered. At such times they are so tame as only to settle on the roof of the cabin when disturbed, and a moment after descend to feed as before.

Though the colour of the crossbill is in general as described above, yet scarce any two of these birds are exactly alike in plumage, but they are of almost all shades of red, green, and yellow, and this without any distinctness of marking in the several specimens. The males and females also assume very different hues respectively, according to the season of the year. They are very singular-looking birds, and cannot be mistaken.



PAREARY MOUSE.

BARBARY MOUSE.

MICE belong to the same general family as the rats, and succeed immediately to the marmots and the squirrels in the scientific arrangement of nature.

There are many kinds of mice, among which, in addition to the species so commonly, and often so injuriously known in this country, we may mention the long-tailed field mouse, the short-tailed field mouse, and the Barbary mouse, the one at present under consideration. Then comes the hamster, sometimes called the German marmot, the Canadian musk-rat, otherwise known by the name of the ondatra, or musquash, the water-vole, and several other kinds.

Of the Barbary mouse, Mr. Fennell remarks, "this species, the prettiest and most elegant of all, was first described by Linnæus, in the addenda to the twelfth edition of his *"Systema Naturæ."* For a long period after that publication, it entirely eluded the observation of zoologists, until of late, when a litter of five young ones was obtained at Barbary, and three of them having survived the passage to England, were placed in the Regent's Park Zoological Gardens, in 1828. Mr. Bennett, describing them when they had been in the collection above a year, says, "They are intermediate in size to the common rat and common mouse, while Linnæus describes his to have been smaller even than the latter; but, perhaps, he had seen none but smaller individuals, which supposition is in some degree strengthened by his adding, that they were occasionally marked by a scarcely perceptible line between the lateral stripes; a

circumstance which not unfrequently occurs in the young of striped animals, and slight vestiges of this original marking were visible in the society's specimens. In every other respect the coincidence was complete.

Their ground colour was dark brown, marked on each side with five or six yellowish stripes, about half as broad as the intervening space, extending along the whole length of the body, and becoming confused towards the under parts, which are nearly white. On the fore feet only three toes were at first sight observable, but on closer inspection, the rudiments of a thumb and also of a fifth toe were detected. The teeth were precisely similar to those of the other rats. During their captivity, these animals appeared healthy and lively, and, with reference to the habits of the genus, were moderately tame, though shy and timid."



SCARLET TANAGER

SCARLET TANAGER.

THE scarlet tanager, or summer red-bird, is one of the most beautiful of its race; the male in full plumage being scarlet-red, with the wings and tail black.

From the beginning to the middle of May this richly-coloured bird makes its appearance in Pennsylvania, and several other of the American States; avoiding the neighbourhood of human habitations, unless perhaps the skirts of the orchard, where he sometimes, however, builds his nest and takes a taste of the early and inviting, though forbidden, cherries.

"Among all the birds," says Wilson "that inhabit our woods, there is none that strikes the eye of a stranger, or even a native, with so much brilliancy as this. Seen among the green leaves, with the light falling strongly on his plumage, he really appears beautiful. If he has little of melody in his notes to charm us, he has nothing in them to disgust. His manners are modest, easy, and inoffensive; benefitting the husbandman, by the daily destruction in spring of many noxious insects; and when winter approaches, he is no plundering dependent, but seeks in a distant country for that sustenance which the severity of the season denies to his industry in this. He is a striking ornament to our rural scenery, and none of the meanest of our rural songsters.

"Among the thick foliage of the tree," says Nuttall, "in which he seeks support and shelter, from the lofty branches, at times, we hear his almost monotonous *tship-witee*, *tship-idee*, or *tshukadee*, *tshukadee*, repeated at short intervals, and in a pensive under-tone, height-

ened by the solitude in which he delights to dwell. The same note is also uttered by the female when the retreat of herself and young is approached; and the male occasionally utters, in recognition to his mate, as they perambulate the branches, a low whispering *'tail'*, in a tone of caution and tenderness.

The nest, which is built about the middle of May, on the horizontal branch of some shady forest-tree, commonly an oak, but sometimes in an orchard tree, is but slightly put together, and usually framed of broken rigid stalks of dry weeds or slender fir twigs, loosely interlaced, and partly tied with narrow strips of grass or other frail material; lined with slender pine leaves; the whole so thinly platted as to admit the light through the interstices.

The eggs are three or four in number, of a dull blue, spotted with shades of brown or purple.

The female shews great solicitude for the safety of her only brood; and, on an approach to the nest, appears to be in great distress and apprehension. So attached to his young is the male bird, that he has been known, at all hazards, to follow for half-a-mile, one of his young, submitting to feed it attentively through the bars of a cage, and, with a devotion which despair could not damp, roost by it in the branches of the same tree with its prison.

The food of this species consists mostly of winged insects, such as hornets, wasps, and wild bees, the smaller kind of beetle, and other coleoptera. Seeds are supposed to be sometimes resorted to, and they are very fond of whortle and other berries.



RABBIT.

THIS is a well-known and harmless little animal. It strikingly resembles the hare in general appearance, as well as in habits, so that a person who was not aware of the contrary fact, might, and probably would take it for granted that they were the same species, the one the young of the other. There are, however, on a closer inspection, several points of dissimilarity to be observed. The rabbit is a thicker-set animal than the hare; the ears are shorter in proportion, and have not the tips so black; and the hind legs are shorter.

Mr. Henry Turner, of the Botanic Garden, at Bury St. Edmunds, says that rabbits will take the water if pursued, and that he has seen four do so, when they might have escaped otherwise, without getting wet. This the writer can confirm from his own observation. He once saw a rabbit disturbed by some persons walking at the top of a cliff, dash down it, and enter the sea. It was captured on reaching the land, but was soon afterwards set at liberty again.

In general, rabbits remain within their burrows during the day, and come out of them, to feed, in the dusk of the evening. This is not, however, their exclusive habit, for sometimes, and especially after a shower has fallen, many of them may be seen feeding above ground, in the neighbourhood of their holes, even in the broad day. To this Shakspeare alludes in his play of *Coriolanus*, Act iv. Scene 4.

"They will out of their burrows
Like conies after rain."

They are very destructive animals, and as their numbers increase in so remarkable a manner, they require to be kept under, or they would most seriously injure the fruits of the earth, their food consisting of corn, grass, turnips, carrots, and the bark of trees; in fact almost anything that is green.

"In a wild state, the colour is generally uniform, but when domesticated, which it is more easily than the hare, it varies greatly. It inhabits the temperate and warmer regions of Europe, Asia, and Africa, and is common on the British Continent and Islands. It lives from eight to nine years, and breeds seven times a year, bringing forth four to eight at a time, which are full-grown in six months. Its flesh is white and delicate, and its fur of some value.

Extensive warrens are kept on different parts of the Island, where the sandy soil precludes more valuable products. There are three kinds in this country, the common grey rabbit, the black rabbit, and the silky rabbit, found in the Isle of Man, and some other Islands, supposed to have been originally brought from Angora. The fur is of a dirty ash-colour, paler beneath, and of a silky fineness, three inches or more in length. They do not associate with the other kinds."



CHAFFINCH.

CHAFFINCH.

THE chaffinch is a very common species of bird in this country, and a very handsome one, especially the male bird. It is particularly remarkable for the singular beauty of the nest that it builds. The following description and account of it is given by Bewick, in his "History of British Birds:"—"The bill is pale blue, tipped with black; eyes hazel; forehead black; the crown of the head, and the hinder part and sides of the neck bluish ash; the sides of the head, throat, fore part of the neck, and the breast vinaceous red; the back is reddish brown, changing to green; both the greater and lesser coverts are tipped with white, forming two pretty large bars across the wing; the quill feathers are black, edged with yellow; the tail is a little forked, and black, the outermost feather edged with white; legs brown. The female wants the red upon the breast; her plumage in general is not so vivid, and inclines to green; in other respects it is not much unlike that of the male.

This beautiful bird is everywhere well-known; it begins its short and frequently-repeated song early in spring, and continues it till about the summer solstice, after which it is no more heard. It is a lively bird, which, with its elegant plumage, has given rise to the proverb, "as gay as a chaffinch." The nest is very neat and compact, and constructed with much art, of small fibres, roots, and moss, and lined with wool, hair, and feathers. The female generally lays five or six eggs, of a pale reddish colour, sprinkled with dark spots, principally at the larger end. The male is very

assiduous in his attendance during the time of hatching, seldom straying far, and that only to procure food.

Chaffinches subsist chiefly on small seeds, likewise on caterpillars and insects, with which they also feed their young. They are seldom kept in cages, as their song possesses no variety, and they are not apt in learning the notes of other birds. The males frequently maintain obstinate combats, and fight till one of them is vanquished."

In that always popular and charming work, "White's Natural History of Selborne," he points out the fact, which is indeed constantly to be witnessed, that, in the winter, the large flocks which appear in some parts of the country, are entirely composed of hen birds.



ICHNEUMON

ICHNEUMON.

THERE are several species of this tribe of animals, nearly a dozen being found in Africa. The Egyptian ichneumon, also known by the name of Pharoah's rat, is very common in that country, and extremely useful to the inhabitants as a destroyer of vermin.

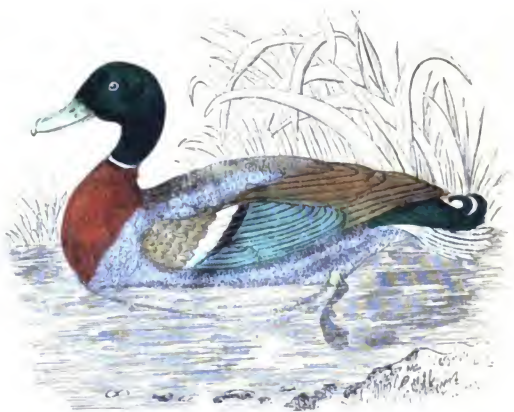
"The ichneumon, at the head of the weasel tribe for utility, abounds in all the southern parts of Asia, from Egypt to Java, and is also found in Africa, particularly about the Cape of Good Hope. Its usual size and appearance is that of the marten, only the hair, which is of a grizzly black, is rougher, nor is the tail so bushy at the end; but having been long domesticated, there are many varieties both of size and colour. It is an active, strong, and courageous animal; it attacks every living thing that it is able to overcome; it fears neither the open force of the dog, nor the insidious strength of the cat, the claws of the vulture, nor the poison of the viper, and as indiscriminately preys upon all kinds of flesh, rats, mice, serpents, or lizards. While eating, it sits upright, and uses its fore feet to bring its food to its mouth. Its peculiar value to the Egyptians, however, consists in its being the determined persevering enemy of the crocodile, whose eggs it searches out and destroys, and whose young it kills ere they reach the water, for which it was deified and worshipped by the "wise" Egyptians."

It generally contrives to seize a snake by the throat, in such a way that it cannot itself be injured by the fangs of the reptile. It is thus alluded to by the poet,

Lucan, in his "Pharsalia," written about the year 62:—

"Thus oft th' ichneumon on the banks of Nile,
Invades the deadly aspic by a wile;
While artfully his slender tail is play'd,
The serpent darts upon the dancing shade;
Then turning on the foe, with swift surprise,
Full on the throat the nimble seizer flies,
The gasping snake expires beneath the wound,
His gushing jaws with poisonous floods abound,
And shed the fruitless mischief on the ground."

This animal frequents the banks of rivers, and, like the otter, is an expert diver and swimmer, and is able to remain for a considerable time under the water. In that country, however, as is so well known, inundations periodically occur, and then the ichneumon resorts to higher grounds, and approaches near to the habitations of man.



WILD DUCK

WILD DUCK.

THIS is a valuable species of bird, being in much esteem for the table; and vast quantities are procured every year, especially in hard winters, when the severity of the frost drives them from their river haunts into the more open country, where they fall more within the way of many fowlers. Numbers are shot, and still larger quantities are procured in decoys, in different parts of the island.

The male bird, mallard, or drake, as it is often denominated, is thus described by Montagu:—"It weighs about two pounds and a half; length near twenty-three inches; the bill is of a yellowish green; irides, hazel; the head and upper part of the neck, deep glossy green, bounded below with a white circle, which almost surrounds the neck; the lower part of the neck before, and the breast, dull purplish; the back is brown; the sides and scapulars, white, marked with numerous small undulated lines of brown; the rump, upper and under tail coverts, black; on the wing coverts is a transverse streak of white, edged with another of black, beneath which is the speculum, of a fine purplish or violet blue on the secondary quills, which are shaded to a black near the ends, and tipped with white, and forms another narrow line of this last colour on the wings; the belly is pale grey, minutely speckled with light brown, in undulated lines. The tail consists of twenty feathers, the four middle ones are of a glossy greenish black, and curve upwards in a singular manner, and so connected as to appear only as two feathers; the others are straight, pointed, and of a greyish

brown, margined with white.

The duck breeds on many of our rivers and lakes, sometimes at a considerable distance from the water. It scrapes together a little of such vegetables as are contiguous for a nest, and lays from ten to eighteen eggs, of a bluish white. At the time of incubation the female plucks the down from her breast to line the nest, and frequently covers the eggs when she leaves them. It frequently happens that a large variety of this bird is caught in our decoys, or shot by the sportsmen; but these are only half-domesticated ducks, which are obliged to leave the canals or pieces of water belonging to private persons, when they become frozen. These are called Rouen ducks.

It is observable in most kinds of birds whose young leave the nest as soon as hatched, that they deposit their eggs on the ground. There are, however, some instances in which this species, the shelldrake, and perhaps, others, occasionally vary in this particular.

We have been assured, by a person of undoubted veracity, that a half-domesticated duck made a nest in Rumford Tower, hatched her young and brought them down in safety to a piece of water at a considerable distance. Others have been known to breed in trees, and we recollect the nest of this bird being found in the head of an old pollard willow impending the water, from whence the young might readily drop unhurt into their natural element. Mr. Tunstall mentions one at Etchingham, in Sussex, which was found sitting upon nine eggs, on an oak tree twenty-five feet from the ground; and the author of the "Rural Sports," records an instance of one taking possession of the nest of a hawk in a large oak."



BISON.

THE following account of this formidable creature is given by Mr. Fennell:—"The favourite haunts of these animals are the swampy banks of the rivers and rivulets which intersect forests, and from which they seldom wander far. During summer, and the warmer part of autumn, they select sandy spots; but in winter they keep quiet by day, where the fir trees are in the thickest abundance, only browsing at night, and finding sustenance in the bark of young trees: in the spring they resort to neighbouring places, where they can obtain herbaceous plants. The horns are black, of moderate length, and are turned inward and outward, except at their middle part, where they have a perpendicular direction; from tip to tip, round their curves, and over the forehead, they measure four French feet; those of the six year old bull in the Wilna museum, are eighteen inches in girth at their base; the cow's horns are not so strong as the bull's. There is no dew-lap, and only the middle of the upper lip and the borders of the nostrils are bare; the tongue is covered with hard tubercles, and is of a blue colour, as are the lips, gums, and palate; the eyes have ordinarily a mild expression. The fore-quarters are more robust, and the anterior part of the back is more elevated, than the hind quarters, which are slender; the ribs are fourteen in number, being one less than the American bison; and the tail is terminated by a brush of long and bristly hair, which, in young individuals, reaches only to the hock joint, but in older ones, it extends some-

what below. From that part of the skin and hair which covers the convex portion of the forehead, the zubr emits an odour between that of musk and violets.

Occasionally some individuals, particularly such old bulls as walk alone, having left the herd, either of their own accord, or by expulsion, become uncommonly daring and fearless of man. Jarochi relates, that one of these retired veterans used to station himself on the high road, and, undaunted by the cracking of whips, would rush at the passing carriages and sledges, and put the horses to flight. The danger of such a practical joke may be imagined from Dr. Weissenborn's statement, that so enormous is the strength of one of these old fellows, that he can knock down trees of five or six inches in diameter, as if they were merely ninepins. Zubrs are not afraid of either wolves or bears, and they assail their enemies with their horns and hoofs. An old zubr is a match for four wolves, but larger packs of them hunt down even old bulls when alone. A herd of zubrs, however, has nothing to fear from any rapacious animal.

The zubr runs very swiftly, but not having much endurance, it seldom runs more than one or two English miles. When galloping, the hoofs are raised higher than the head, which is carried very low. It is very fond of bathing, and swims with great agility. Its voice is a short grunt, and, when uttered by a whole herd, it sounds, to a person near them, like the distant straggling fire of musketry; but at a greater distance, it resembles the sound produced by the wings of a passing flight of birds."



WEAVER BIRD

WEAVER BIRD.

THE weavers, of which there are several species, are inhabitants of the continent of India, and of Africa.

One of the most remarkable circumstances connected with the history of these birds, is the formation of very elaborate nests, consisting of grasses or vegetable fibres beautifully interwoven together; in some cases suspended at the extremity of a twig or leaf; in others, where multitudes of birds form a sort of community, compacted together so as to form a solid mass, beneath the weight of which, the tree often at length gives way.

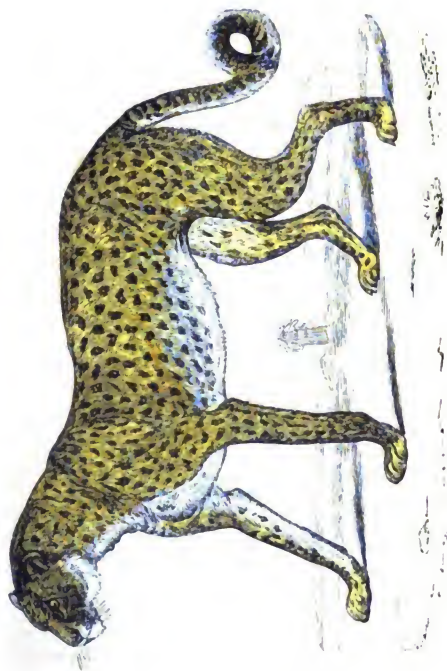
The species, however, which forms the most singular nest—a mass of nests, is the sociable weaver bird of Southern Africa. According to Dr. Smith, the banks of the Orange River constitute the southern limits of the range of this species, which was only obtained in great abundance in the districts around Latakoo, far from water. “The most striking peculiarity,” adds Dr. Smith, “observed in this species, is the extraordinary manner in which a number of them associate and build their nests under a common roof. When a nesting-place has been selected, and the operation of building is to be commenced, they all join in constructing the general covering, which interests them all; that being accomplished, each pair begin to form their own nest, which, like the roof, they construct of coarse grass; these are placed side by side against the under surface of the general covering, and, by the time they are all completed, the lower surface of the mass exhibits the appearance of a flat surface, freely perforated by small circular openings.

They never use the same nests a second time, though they continue for many years attached to the same roof. With the return of the breeding season, fresh nests are formed upon the lower surface of those of the preceding year, which then form an addition to the general covering. In this manner they proceed year after year, till, at last, the weight often becomes such as to cause the destruction of its support, upon which a new building is commenced. They appear to prefer constructing these nests upon large and lofty trees; but where such do not occur, they will even condescend to form them upon the leaves of the aloe.

The commencement of the roof is firmly interwoven with the branches of the trees to which it is intended to be suspended, and often a great part of the principal branch is actually included within its surface. Each female lays three or four eggs, of a bluish white colour, freely mottled towards the large end with small brown dots."

Paterson and Le Vaillant give a somewhat similar account of these nests, some of which they saw of enormous size; the latter traveller mentions one which had three hundred and twenty inhabited cells, each cell being the property of a pair of birds. Thus, then, do these weaver birds found a republic, and cluster together under one roof their separate homesteads; the labour of each busy artificer contributing to the general good.

The food of the weaver bird consists almost entirely of the seeds of plants, especially grasses.



CHEETAH.

CHETAH.

THIS animal is generally classed among the leopard tribe; but, though its place in the system of nature is near them, it does not altogether belong to them, differing in some important particulars. Its claws are only partially retractile, and it is gregarious in its habits. It is, moreover, rather of a milder disposition, so that it is frequently tamed and employed for the chase.

The chetah is also called the hunting leopard, and is a native of the continents of Africa and India. "In size he is intermediate between the leopard and the hound, has a more slender body and longer legs than the former, but wants the graceful form and elongated head of the latter. He is yellow above, with black spots; white below, unspotted; along the back of the neck, and, anterior of the spine, has a mane of upright hairs; his claws are capable of a very limited retraction within the skin. In India he is trained to the chase, and is so gentle as to be led about like a greyhound. He is carried to the field on a cart, hooded, and as soon as game—deer or antelope, come in sight, he is loosed, when, dropping from the opposite side, he creeps softly along till within a short distance of the poor unsuspecting animals; and then, with a few bounds, into the midst of them, with one blow he brings his victim down, and is instantly at its throat."

The chetah takes advantage of every means of making its attack; and when unsuccessful, it returns sullenly to its keeper, who replaces the hood, and reserves him for another opportunity. When, however, he has seized

the quarry, and fixed himself upon its throat, drinking the life-blood warm, his nature breaks out in all its violence, so that it requires some management to separate him from his victim. Partly awed by the keeper's voice, partly enticed by pieces of meat, and a little of the blood, he is induced to give up the prize, and submit to be again hooded.

In captivity the chetah is familiar, gentle, and playful; and becomes greatly attached to those who feed or notice it. The general disposition of these beautiful creatures is, indeed, frank and confiding; so that there is little trouble in rendering them perfectly domestic. Their voice of pleasure is a *purr*; and their voice of uneasiness or hunger, a short repeated *mew*.

Although the chetah is in some respects different from other animals of the cat kind, yet in many it nearly resembles them, and its picture will be found very closely to resemble that of the panther, the leopard, the ounce, the jaguar, and the ocelot. All are fell and relentless blood-suckers, and display the same stealthy method of creeping upon their prey.



WHITETHROAT

WHITETHROAT.

THE following account of this neat little bird, is given by Montagu, in his Ornithological Dictionary:—"This is a very common species, visits all parts of the Kingdom which are enclosed, about the middle of April, and constantly enlivens our hedges with its song; which, Selby says, it utters upon the wing as it rises from the spray on which it has been perched, to a considerable height in the air, descending slowly to the same spot. In executing this movement, its flight is very peculiar; at this time, it erects the feathers on the crown of the head. The nest is made of goose-grass, lined with fibres, and sometimes a few long hairs, but is of so flimsy a texture, that it can afford but little warmth to the eggs or young; this is generally placed in some low bush, amongst nettles or other luxuriant herbs.

This species weighs about four drachms; length, five inches and three quarters; the bill, dusky brown above, whitish beneath; irides, yellowish; the whole upper parts, from head to tail, cinereous brown, coverts of the wings darkest, bordered with brown, inclining to rufous; quills, dusky, slightly edged with cinereous brown; under parts, from chin to tail, greyish white, darkest on the breast and thighs; in some, the breast has a rosy tinge; tail, like the quills; outer feather, white, except at the base of the inner web; legs, pale brown. The female is like the male."

"A very lively and interesting species," says Sweet, "and one of the easiest preserved; its song, also, in my opinion, cannot be surpassed by any bird whatever; it

is both lively, sweet, and loud, and consists of a great variety of notes. One that I at present possess, will sing, for hours together, against a nightingale, now in the beginning of January, and will not suffer itself to be outdone. When the nightingale raises its voice, it does the same, and tries its utmost to get above it. Sometimes, in the midst of its song, it will run up to the nightingale, and stretch out its neck, as if in defiance, and whistle as loud as it can, staring it in the face; if the nightingale attempts to peck it, away it is in an instant, flying round the aviary, and singing all the time. In a wild state, the present species generally visits hedges and gardens. It arrives in this country about the middle of April; and is often heard singing in a thicket, or in the middle of a hedge; sometimes it mounts up in the air a little way, or flies from one hedge to another, singing all the time. It is readily taken in a trap baited with a living caterpillar or butterfly. One that I caught last spring, sang the third day after being in confinement, and continued to sing all through the summer; but this was most likely in consequence of a tame one being with it, which also sang at the same time.

In their native state, these feed chiefly on small insects and a few sorts of fruit, strawberries and raspberries in particular. They are very partial to the different species of aphides, with which almost every tree is covered some time or other in the summer; they are also very fond of the smaller species of butterflies, and the common house-fly. They soon take to feed on bruised hempseed and bread, and also on bread and milk; I have known them to feed on it the day they were caught "



TAPIR.

TAPIR.

Of the tapir there are two species, the American, found, as its name imports, in that continent, and the Malay tapir, which is a native of the peninsula of Malacca, and the island of Sumatra. Remains of this animal, too, in the fossil state, have been found in Germany, France, and Italy; and of a larger size than either of the two kinds now in existence.

The following account of a very young Indian tapir, which Major Farquhar had for some time alive in his possession, is part of a communication made by him to the Asiatic Society:—"It appears, that until the age of four months, this species is black, and beautifully marked with spots and stripes, of a fawn-colour above, and white below. After that period, it begins to change colour, the spots disappear, and at the age of six months it becomes of the usual colour of the adult." Major Farquhar adds that he found the animal to be of a mild and gentle disposition. It became as tame as a dog; and would eat all kinds of vegetables, bread, rice, cakes, or the like, for which it would come to the table.

Sir Stamford Raffles writes of another of these animals as follows:—"The living specimen sent from Bencoolen to Bengal, was young, and became very tractable. It was allowed to roam occasionally in the tank at Barrackpore; and the man who had charge of it informed me that it frequently entered the ponds, and appeared to walk under the water, and not to make any attempt to swim. The flesh is eaten by the natives of Sumatra."

In a further account of this species, we read, "a

Sumatran tapir, procured about the same time with the preceding, and presented to the Asiatic Society by Mr. Siddons, then resident at Bencoolen, was also a most gentle animal, but of very lazy habits. He delighted in being rubbed or scratched, and this favour he solicited from the people about him, by throwing himself down on his side, and making sundry movements." It is distinctly stated of this animal, that another of his great delights was to bathe, and also that he remained a considerable time under the water. The amphibious nature of the Indian, as well as of the American tapir, seems, therefore, to be well established, though it was not observed by Major Farquhar in his specimen; perhaps owing to its ill health, for it very soon died.



REDSTART.

REDSTART.

THIS is a very pretty, and rather common, species of British bird, being a regular summer visitant. It is most common in the southern counties, but is found also in the north.

The following is the description of it:—It weighs about three drachms and three quarters; length, five inches and a half; the bill is black; the eye, hazel; the forehead, white; the crown of the head, the hind part of the neck, and the back, deep bluish grey; the sides of the head, and the throat, are black; the breast, sides, and upper tail coverts, rusty red; the tail itself is red, except the two middle feathers, which, as well as the wings, are brown; the legs, black. The female is light brown, with some grey on the head and the back; the breast, yellowish rufous; the tail, as in the male, but not so bright.

“We have frequently,” says Syme, “met with it in the neighbourhood of Edinburgh. Though a very shy bird, it often approaches and builds near the habitations of man, and constructs its nest in places that we would scarcely expect so timid a bird would select for that purpose. At Craigcrook Castle, near Edinburgh, we found its nest in a hole of a wall, close by an old gate-way, through which people daily pass to the castle; it was placed within reach of the hand from the ground. These birds often haunt orchards, gardens, and shrubberies; but they also frequent solitary situations, among rocks, crags, and woods, where they build in the crevices of dangerous ravines and precipices. Though wild and

timorous birds, they are often found in cities, but always selecting the most difficult and most inaccessible places for the important work of incubation. If the eggs are touched by the hand, unless the hen has sat some time, she will forsake the nest and build again."

Its song is soft and short; and, when perched, it frequently vibrates its tail in a quick and singular manner. Bechstein says its song is lively and agreeable, and, that in addition to its natural note, it sometimes improves it by adding those of other birds among which it is found. "One which had built its nest under my house," he adds, "imitated very exactly the note of a chaffinch I had in a cage in the window; and my neighbour had another in his garden, which repeated all the notes and cadences of the fauvette. This facility in appropriating the song of other birds, is rare in a wild state, and appears to be almost confined to this species, which is very common throughout Europe and Asia. It leaves Germany in the early part of October, and again returns in March or April. During the spring and autumn, they haunt the hedges and skirts of the forests, but in the summer, they frequent the gardens, where they recompense their host, if he happen to be a lover of nature, by their morning and evening song."

The redstart arrives in this country early in April, and departs the latter end of September.



ORYX.

ORYX.

THE species of antelopes are numerous, and differ very much from each other. They frequent the cliffs and ledges of mountain rocks, the bush-tangled wastes on the tropical plains, and the margins of the arid wildernesses. There they bound, and spring, and career, fleet as the winds; now balancing themselves where one would hardly imagine there was foot-fall for a bird; now clearing the jungle as if they were winged creatures; and now bounding along the plain with the speed of the winds. To those who have been accustomed only to the motions of the more sober animals—to the heavy tread of the ox, or the pattering trot of the sheep, the antelopes present something truly novel. From some unseen hollow among the cliffs, one of these animals will bound upwards, and alight upon its feet on a pinnacle only a few inches in breadth. There it will stand in perfect security, with its feet all touching each other, and its back bent like a bow, surveying the cliffs around; and no sooner has it espied a new footing to its mind, than it bounds off again, though the distance be many fathoms. Nor, if it is upon a journey of some length, can it be contented with walking or even with running along the plain; but proceeds by a few fleet steps and a still fleeter bound alternately, as if it were utterly unable to keep its own energy within limits.

The size of the oryx is somewhat superior to that of a deer, and it is more easily distinguished than many others of its race; the horns affording a character perfectly clear and constant, being three feet long, nearly

straight, and gradually tapering to the point. The head is white, with triangular patches of black on the forehead and under the eyes; the neck and upper part of the body are of a pale bluish grey; the under part of the body and sides of the limbs are white; and a dark stripe, runs along the back to the tail, which much resembles that of a horse. The hoofs and horns are black; the hair under the throat, along the ridge of the back, and over the shoulders, is long and rough. It inhabits different parts of Africa, and is met with also in Persia, India, and Arabia. It is resolute and dangerous when hard pressed, its long sharp horns being used with amazing energy and address.



SUPERB BIRD OF PARADISE.

SUPERB BIRD OF PARADISE.

THERE are a good many species of these most singular-looking birds, some more beautiful than others, but all striking to the eye. They have obtained their name from the splendour of their plumage. They are natives of New Guinea and the adjacent islands.

The one best known is called the Great Bird of Paradise, and is about the size of a thrush in reality, but the great length of the plumes give it altogether a much larger appearance. "It has a strong straight bill, with small nostrils, which are covered with feathers of a velvet tissue and metallic lustre produced from the base. The wings are large, compared with the bird's other dimensions; the feathers of the hinder part of the breast and belly are singularly extended into bunches longer than the body; and the tail, measuring six inches, is of equal length with it; but what chiefly attracts notice, is two naked filaments, which spring from the upper part of the rump, above the tail, two feet long, of a deep black colour, bearded at the insertion and at the point with downy feathers of a changeable hue. The front of the head, throat, and neck, are of a shining yellow; the hinder part of the head is of a brilliant green, mixed with gold; and the body and wings are beautifully variegated with brown, purple, and gold.

These birds are gregarious, always seen in large flocks, and perching at night upon the same tree. They live on fruits, and are said to be particularly fond of aromatics. It is the male that furnishes plumes for adorning the

heads of our fair countrywomen. These birds are killed by the natives with blunt arrows, and sold to the Europeans; but as this forms a lucrative kind of merchandise, the "virtuous" Chinese fabricate specimens of these celestial fowls, of the feathers of parrots and paroquets, which they sell to strangers, and by which craft they make great gain."

The bird of paradise was first made known in Europe about the year 1522. It was imported by Anthony Pigafetta, one of the companions of the celebrated Magellan in his voyage round the globe, when he discovered the straits in South America which connect the Atlantic and Pacific Oceans, and still bear his name.

For a long time the absurd and ridiculous notion prevailed, that birds of this kind had no legs or feet, and consequently, that they floated perpetually in the air, or, if they had occasion to rest themselves at all, that they suspended themselves from a branch of a tree by the long filaments which spring from the lower part of the back. It was also believed that they never descended to the earth until the time of their death; and that those which were procured were obtained immediately on their thus falling. The fact, however, was, as Pigafetta had proof of by ocular demonstration, that the natives of the regions where the birds of Paradise are found, cut the legs off before selling them, considering them as having no beauty, as being of no value.

While flying, the note of this species resembles the clamour of the starlings; but at other times their voice is like that of the raven.



PINE MARTEN.

PINE-MARTEN.

THE pine-marten, a native of the north, and an inhabitant of the pine forests, whence it derives its name, is abundant in Siberia and the northern portions of America, and is not uncommon among the wooded ravines in the wild mountainous districts of Scotland and Wales.

It builds its habitation chiefly on the top of the fir, or seizes on the already-formed nest of the squirrel, or of some bird, whence it drives the owner, and enlarges for its own convenience. It is rather less than the common marten, but its fur is finer and darker, and the throat and breast yellow instead of white. In summer they assume a lighter tinge, and their hair becomes shorter: in winter their toes are well protected by long wool, which drops off as the weather gets warm. Its habits are similar to the common marten, but more fierce: it never meets the wild cat without a deadly encounter, and is sometimes victorious even over the golden eagle, when the bird pounces on it as its prey; seizing the aggressor by the throat, and bringing it lifeless to the ground.

The agility and gracefulness of these animals is remarkable; they climb trees with the ease of the squirrel, and traverse their branches, or leap from bough to bough with admirable address and celerity.

Before the union, the fur of this species formed a lucrative article of export from Scotland; at present, immense quantities are brought from Siberia; and in one year, the Hudson Bay company, alone, sold fifteen thousand skins.

The American pine-marten differs from the European, by having a shorter tail, and fuller fur: their skins are annually imported into England. Dr. Richardson observes that in America "particular races of martens, distinguished by the fineness and dark colour of their fur, appear to inhabit certain rocky districts. The rocky, mountainous, but wooded region of the Nipogon, on the north side of Lake Superior, has been long noted for its black and valuable martens' skins." The animal is usually taken in traps, baited with the head of a bird. It is very bold, and when attacked, shews its teeth, hisses like a cat, and bites with great severity.

The pine-marten of Siberia haunts the gloomy pine forests, which stretch over immense tracts of country, remote from human abodes. It is into the midst of these wilds that the hunter has to penetrate in pursuit of his game; and the chase is carried on in the winter, for it is then that the fur is the finest. Great are the hunter's perils and privations: he has to traverse plains and mountains covered with snow, and swept by the keen tempest of an arctic winter; to spend days and nights in patient watching, and in the solitudes of the dismal forests; he is exposed to overwhelming snow-storms, of which, in our climate, we can form but an imperfect idea. He often loses his way; his provisions fail; and he finds himself exposed to all the horrors of cold and famine.



GOLDFINCH.

GOLDFINCH.

THE goldfinch is a small bird, not weighing above half-an-ounce, but is one of the most beautiful and harmonious we have. The bill is in the form of a lengthened cone, light yellow, black at the base, with a dark tip; the forehead, temples, and throat, bright red; the cheeks and breast, yellowish brown; the wings, bright yellow on the inner half, the other black, tipped with white; the tail also is variegated black and white.

It builds in shrubs, and frequently in fruit trees, a nest most exquisitely constructed. Grahame, in his "Birds of Scotland," has well described in a few lines the nest of this bird, and the situations in which it chooses to build, which, it will be seen, vary considerably at times in their character:—

"With equal art externally disguised,
But of internal structure passing far
The feathered concaves of the other tribes;
The goldfinch weaves, with willow down inlaid,
And cannach tufts, his wonderful abode.
Sometimes, suspended at the lumber end
Of plane-tree spray, among the broad-leaved shoots,
The tiny hammock swings to every gale;
Sometimes in closest thickets 'tis conceal'd;
Sometimes in hedge luxuriant, where the brier,
The bramble, and the plum-tree branch,
Warp through the thorn, surmounted by the flowers
Of climbing vetch, and honeysuckle wild."

The notes of the goldfinch are not loud, but sweet in an uncommon degree. It is extremely mild and docile. If well attended to and gently treated, it will

become in a few weeks as familiar with its keeper as if it had been brought up by him from its youth. As if conscious of its beauty, it delights, when in captivity, to view itself in a mirror, which, to gratify this propensity, is sometimes fixed in its cage. Its food consists of the seeds of thistles and other plants.

Montagu observes that the goldfinch is subject to some variety in confinement; and also that "a variety is sometimes taken by the bird-catchers, with white spots under the throat; and such is termed a *cheverel*." The female does not differ much in plumage from the male bird, but the smaller coverts of the wing are not so black. The young birds are brown about the head for some time after they have been able to leave the nest; and are sometimes, therefore, known by the name of *grey-pates*.

Many anecdotes are related of the intelligence and docility of the goldfinch, which can be taught to perform a variety of tricks, such as letting off a small cannon, feigning itself dead, drawing up buckets of water, etc.; but no lover of nature will care for any such unnatural and forced exhibitions.



RACCOON.

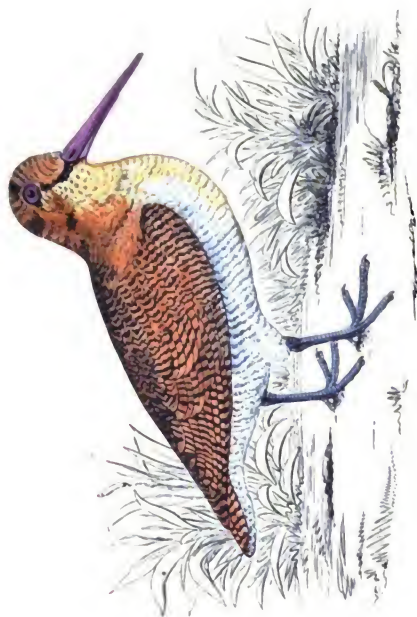
RACCOON.

THE racoon is a native of North America and the West Indies; particularly the mountainous parts of Jamaica, whence it descends in destructive numbers on the sugar plantations. It is about two feet long, and one high; its head is like that of a fox, but its ears more rounded, and its nose shorter and sharper; its eyes are large. Its tail is about as long as the body, thick at the insertion, tapers to a point, and is marked by black and white rings; its fur is fine, long, thick, and grey, dark on the surface; lighter eyes, and a dusky line running down the middle of the face.

In the wild state the racoon is savage and sanguinary, committing great slaughter among both wild and domesticated birds, as it always destroys a great number without consuming any part of them except the head, or the blood which flows from their wounds. It will also occasionally commit ravages in plantations of sugarcane, or of Indian corn; it also feeds on various kinds of fruit, and is said to devour the eggs of birds. This animal is a good climber, and the form of its claws enables it to adhere so firmly to a branch of a tree, that it requires no slight exertion to disengage it. It chiefly feeds by night, keeping in its hole during the day, except in dull weather: it has a kind of oblique gait in walking, can leap and climb with great ease, and is very frequently seen on tress. In the domesticated state it is extremely restless and inquisitive, examining everything; will live on bread, milk, fish, and eggs; is particularly fond of sweets of every kind, and has as

great a dislike to acids.

Captivity, however, produces considerable changes in the habits of the racoon; for instead, as in a state of nature, of sleeping during the day, and roaming about at night in search of food, it will learn to be active during the day, and to remain quiet at night. In eating it commonly sits on its hind legs, and uses its fore feet like a squirrel. One of its most marked peculiarities, and on which its specific name of *lotor*, or the washer, is founded, is its habit of plunging its dry food into water before eating it. It is extremely expert in opening oysters, on which, as well as crabs, it frequently feeds. Although, when tamed, it is noted for its active and playful habits, it is capricious, and not easily reconciled when offended. In its wild state it generally inhabits the hollows of trees; but when domesticated, it shews no particular inclination for warmth. When inclined to sleep, it rolls itself up into a kind of ball; and in this position it sleeps so profoundly, as not to be easily disturbed.



WOODCOCK.

WOODCOCK.

THE woodcock measures fourteen inches in length, and twenty-six in breadth; and weighs about twelve ounces. The shape of the head is remarkable, being rather obtusely triangular than round, with the eyes placed near the top, and the ears very forward, nearly on a line with the corners of the mouth. The upper mandible, which measures about three inches, is furrowed nearly its whole length, and at the tip, it projects beyond, and hangs over, the under one, ending in a kind of knob, which, like those of others of the same genus, is susceptible of the finest feeling, and calculated by that means, aided, perhaps, by an acute smell, to find the small worms in the soft moist ground, from whence it extracts them with its sharp-pointed tongue. With the bill it also turns over and tosses the fallen leaves in search of insects which shelter underneath.

The crown of the head is ash-colour; the nape and back part of the neck are black, marked with three bars of rusty red; a black line extends from the corners of the mouth to the eyes, the orbits of which are pale buff. The whole under parts are yellowish white, numerously barred with dark waved lines. The tail consists of twelve feathers, which, like the quills, are black, and indented across with reddish spots on the edges; the tip is ash above, and glossy white below. The legs are short, feathered to the knees, and, in some, are bluish, in others, sallow flesh-colour; the upper parts of the plumage are so marbled, spotted, barred, streaked, and variegated, that to describe them

with accuracy would be difficult and tedious. The colours, consisting of black, white, grey, red, brown, rufous, and yellow, are so disposed in rows, crossed and broken at intervals by lines and marks of different shapes, that the whole seems to the eye, at a little distance, blended together and confused, which makes the bird appear exactly like the withered stalks and leaves of ferns, sticks, moss, and grasses, which form the back-ground of the scenery by which it is sheltered in its moist and solitary retreats. The sportsman only, by being accustomed to it, is enabled to discover it; and his leading marks are its full, dark eye, and glossy silver-white-tipped tail. The female differs very little from the male, except in being a little larger, and less brilliant in her colours.

The woodcock is migratory, and in different seasons is said to inhabit every climate. It leaves the countries bordering upon the Baltic in the autumn and setting in of winter, on its route to this country. They do not come in large flocks, but keep dropping in upon our shores singly, or sometimes in pairs. They must have the instinctive precaution of landing only in the night, or in dark misty weather, for they are never seen to arrive, but are frequently discovered the next morning in any ditch which affords shelter, and particularly after the great fatigue occasioned by the adverse gales which they often have to encounter on their aerial voyage.



MUSK OX.

THIS animal, though of considerable size, is considered by naturalists to form a connecting link between the ox and the sheep; "the horns and part of the form connecting it with the one, and the woolly hair allying it to the other. They belong to the treeless and barren lands of America, from the sixtieth degree of north latitude to Melville Island. Their size is nearly that of a small Highland bullock, rather shorter in the legs; the head is large, and the horns, very broad, bending backward, and almost joined at the root, cover the brow and crown of the head; the upper lip and part of the lower is covered with short white hair; on the remainder of the head, and on the neck and between the shoulders, the hair is long and somewhat curled, of a brown colour; on the back and hips it is smooth, and on the shoulders, sides, and thighs, it is so long as to hang down to the middle of the legs; the hair on the throat and chest is very straight, and, together with the hair of the lower jaw, hangs down like a beard or dewlap; the tail is so short as to be concealed by the fur of the hips. The cow is less in size, and has shorter hair on the chest and throat. Their smell is exquisite, and warns them of danger before it can otherwise be perceived. Its temper is rather placid."

Dr. Richardson states that "notwithstanding the shortness of its legs, the musk ox runs fast, and climbs hills and rocks with great ease. One which we pursued on the banks of the Coppermine, scaled a lofty sand-cliff having so great a declivity that we were obliged to crawl on

our hands and knees to follow it." Although, however quietly disposed if not molested, the musk ox is a very formidable opponent if assailed: thus Captain Franklin says that "the musk oxen associate in herds, and generally frequent barren grounds and rocky places; during the summer months keeping near the rivers, but retire to the woods in winter. They seem to be less watchful than most other wild animals, and, when grazing, are not difficult to approach, if the hunters go against the wind. When two or three men get so near a herd as to fire at them from different points, these animals, instead of separating or running away, huddle close together, and several are generally killed; but if their wounds are not mortal they become enraged, and dart in the most furious manner at the hunters, who must be very dexterous to evade them. They can defend themselves by their powerful horns against wolves and bears, which, as the Indians say, they not unfrequently kill."

"The food of the musk ox appears to be the same as that of the reindeer; browsing, during the chief portion of the year, upon the lichens which cover the rocks; but in summer feeding upon the twigs of willow, birch, pine-shoots, coarse grass, and other herbage.

When fat, the flesh, especially of the bulls, is well flavoured, and resembles that of the reindeer, but has a coarser grain. Both sexes, when lean, smell strongly of musk, their flesh at the same time being dark and tough, and far inferior to that of any other North American ruminant."



BLACKBIRD,

BLACKBIRD.

THIS well-known bird is a very common species in this country, and is highly esteemed on account of its song, which, however, is by no means equal to that of the thrush. Its outward appearance is indeed singularly plain and unpretending, but we may hence learn that good qualities are to be much more highly valued than a showy exterior.

The length of the blackbird is about ten inches; the entire plumage of the male is a shining black, the eyelids being bright orange-colour, and the bill of a like colour; the legs and toes brown, and the claws dusky. The hen bird has very little resemblance in colour to the male. The feathers of all the upper part are of a dusky olive brown, palest on the forehead and the sides of the neck, and darkest over the tail. The outer webs of the quill and tail feathers are edged with ash-coloured brown, with lighter streaks along the shafts. The chin is greyish white, shaded into brown rust-colour on the upper part of the breast, the lower part being dark ash-colour. The bill is dark brown, the edges being yellowish brown, and the eyelids yellow.

This species is common also throughout the greater part of Europe and Asia; as far to the north as Norway, and towards the south as Syria. The food of the blackbird varies according to the season of the year. In spring and summer they eat both insects and fruits, and in the autumn and winter they chiefly subsist on berries, together with such insects or their larvæ as, in fewer numbers, they may then be able to obtain.

The blackbird is a more shy bird than the song thrush or the missel thrush; and though a constant frequenter of gardens and orchards, is, for the most part, when observed, at least when it perceives that it is observed, to be seen flying away, as if conscious of the mischief that it does among the garden fruits, which have not, it must be confessed, a more determined or destructive enemy. Their song, however, makes amends for many such trifling losses, and we must balance the one against the other.

“Shy in its disposition, and solitary in its habits, this bird conceals itself in thickets, brushwood, and clumps of evergreens, which its short wings enable it to thread with ease and celerity. Moist woods and tangled copses by the river side, or, in winter, springy places, are much sought for, as affording worms and ground insects, in which the bird delights. Whenever it ventures from the shelter of these retired spots, it flies with haste and precipitation; and its colouring is so out of harmony with the surrounding objects, as to render it of conspicuous appearance. In a snow-scene only is its shining black plumage seen to advantage; then it is truly picturesque. When on the ground the blackbird runs lightly, and looks timidly about; and, while searching for worms and other food, frequently raises and depresses its tail with sudden jerks, accompanied by a lateral expansion of the tail feathers.” The blackbird will always be a favourite with the lover of English scenery.



ZORILLA.

ZORILLA.

THIS animal is a native of Spanish América, where it is called the mariputa. It is found on the banks of the River Orinoco; and, although extremely beautiful, it is at the same time the most offensive of all creatures. Its body is beautifully marked with white stripes upon a black ground, running from the head to the middle of the back, from whence they are crossed with other white bands, which cover the lower part of the back and flanks. Its tail is long and bushy, black as far as the middle, and white to its extremity.

It is an active and mischievous little animal. Its stench is said to extend to a considerable distance, and is so powerful as to overcome even the panther of America, which is one of its greatest enemies. Notwithstanding this offensive quality in these animals, they are frequently tamed, and will follow their master. They do not emit their odour unless when beaten or irritated. They are frequently killed by the native Indians, who immediately cut away the noxious glands; thereby preventing the flesh, which is good eating, from being infected. Its taste is said nearly to resemble the flavour of a young pig. The Indians also make purses of their skins.

The animals of the weasel tribe are particularly distinguished by the length and slenderness of their bodies, which are admirably adapted to their manner of living, and method of taking their prey. They are so small and flexible, that they can wind into very small crevices and openings, where they easily follow the little animals

that serve them for food. They are all equally marked for rapine and cruelty. As their prey is precarious, they can live a long time without food. When they fall in with plenty, they immediately kill every thing within their reach, before they begin to satisfy their appetite, and always suck the blood of every animal they kill, before they eat its flesh.



GRASSILL.

HORNBILL.

THESE are a most singular kind of bird. They are of large size, and are natives of different parts of India, and also of Africa. Their length is about two feet and a half; and they are described as having "a curved bill of more than five inches long, having saw-like margins, and on its upper part a protuberance whose shape varies with age; and in very young birds is not even visible, rounded at the top, reaching two-thirds of its length, and black on the fore-part. The plumage is in general black, tinged with green on the upper part of the body; the legs are black and very short.

They are omnivorous, eat soft fruits, reptiles, and even carrion. They are excellent mousers, and are reared in a domestic state by the inhabitants on the Island of Ceylon, for clearing their houses of vermin. Their manners in the woods are singular: they seldom visit the ground, but, flying into a tree, or from one tree to another, they traverse the branches; commencing with the lowest, they delight to spring from branch to branch, till they reach the topmost, which, when they have gained, they suddenly stop, and utter a loud roaring sound, which may be heard at the distance of at least half-a-mile, and resembling the roar of some ferocious beast, is terrific to those who do not know whence it proceeds." The progressive motion of these birds on the ground, is by hopping or jumping along.

M. Lesson, in describing the habits of the hornbills, states, "Those of Africa live on carrion; those of the East Indies seek for fruits, especially nutmegs; and their

flesh thence acquires a delicious flavour. Their flight is performed by repeated strokes of the wings, and the air which they displace, joined to the clattering of their mandibles, occasions a great and disquieting noise in the forests, when the cause is unknown. This noise, capable of inspiring terror, does not ill resemble those flows of rough and sudden winds, which arise so unexpectedly between the tropics, and blow so violently. The Europeans established at the Moluccas, think that the furrows which are seen on the beaks of the hornbills are the result of age, and that each furrow signifies a year; whence the name of Jerarrogel, which they give to these birds."



ESQUIMAUX DOG.

ESQUIMAUX DOG.

THIS is a very handsome species or variety of dog, and bears some resemblance both to the sheep-dog and the wolf-dog. Its ears are short and erect, and its tail bushy, and carried in a curved manner over the back. In this respect it differs from the wolf-dog, which in general carries its tail between its legs in running. Some of these animals are as large as the Newfoundland dog; but for the most part they are about a foot and a half in height, and about three feet three inches in length, from the end of the nose to the tip of the tail, the latter being about one foot one inch long. In colour the Esquimaux dog varies, some being white, some black and white, others black, and others of a dull red.

In the "Account of the Menageries," we find the following particulars of these useful animals:—"Those people inhabiting the most northerly parts of the American Continent, and the adjoining islands, are dependent upon the services of these faithful dogs for most of the few comforts of their lives—for assistance in the chase; for carrying burdens; and for their rapid and certain conveyance over the trackless snows of their dreary plains. The dogs, subjected to a constant dependence upon their masters, receiving scanty food and abundant chastisement, assist them in hunting the seal, the reindeer, and the bear. In the summer, a single dog carries a weight of thirty pounds, in attending his master in pursuit of game: in winter, yoked in numbers to heavy sledges, they drag five or six persons at the rate

of seven or eight miles an hour, and will perform journeys of sixty miles a day. What the reindeer is to the Laplander, this dog is to the Esquimaux. He is a faithful slave, who grumbles, but does not rebel; whose endurance never tires; and whose fidelity is never shaken by blows and starving. These animals are obstinate in their nature; but the women, who treat them with more kindness than the men, and who nurse them in their helpless state, or when they are sick, have an unbounded command over their affections, and can thus catch them at any time, and entice them from their huts, to yoke them to the sledges, even when they are suffering the severest hunger, and have no resource but to eat the most tough and filthy remains of animal matter which they can espy on their laborious journey."

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ROSE-COLOURED PASTOR.

ROSE-COLOURED PASTOR.

THIS handsome bird is of but very unfrequent occurrence in this country, but several have been observed in various counties during the last few years, since more attention has been paid by many persons to the study of ornithology. The rose-coloured pastor, or, as it is generally termed, the rose-coloured starling, is about the size of the common starling, and will be found to answer to the following description:—"The head, which has a rather large crest, neck, wings, and tail of the male, are black, and the rest of a pale rose-colour, inclining to salmon-colour, or nearly peach blossom, with the least possible tinge of orange in it; the black of the head, crest, and neck is intense and velvety, with exquisite, though rather obscure, reflections of green and violet. The female has a shorter crest, and the body more inclining to grey or brown. The young are brown all over, mixed with grey, especially on the throat; they want the crest, and are sometimes like young starlings, but more round and compact; their legs are dull brown, whereas those of the old birds are dull red. In Britain they are very rare stragglers, seen only in the heat of summer; they are, indeed, only summer migrants in the south of Europe. In the countries which they do visit in summer, they and the orioles are of vast service in destroying the larvæ of insects."

The rose-coloured pastor is an inhabitant of Syria, Egypt, and Africa, and occasionally it passes in the summer into some of the warmer countries which lie on the north of the Mediterranean, for the purpose of

rearing its young. It is held sacred at Aleppo, on account of the good that it does, in feeding on the locusts, which are so great a pest in those parts of the world.

In the translation of M. Bechstein's work on Cage Birds, it is related that "A sportsman discovered in 1794, in the environs of Meiningen, in Suabia, a flight of eight or ten rose ouzels, moving leisurely from south-west to north-east, and passing from one cherry tree to another. He fired on these birds; only one fell, which was fortunately very slightly wounded, so that it soon recovered. Being immediately carried to M. Von Wachter, the rector of Frickenhausen, this clergyman took the greatest care of it: he gave it a spacious cage; and found that barley-meal, moistened with milk, was as wholesome as agreeable to it. His kindness tamed it in a short time so far that it would come and take from his hand the insects which he offered it. It soon sang also, but its warbling consisted at first of but a few harsh sounds, pretty well connected, however; and this became at length more clear and smooth. Connoisseurs in the songs of birds discover in this song a mixture of many others: one of these connoisseurs, who had not discovered the bird, but heard its voice, thought he was listening to a concert of two starlings, two goldfinches, and perhaps a siskin; and when he saw that it was a single bird, he could not conceive how all this music proceeded from the same throat. This bird was still alive in 1802, and the delight of its possessor."



SQUIRREL (SCALOPUS)

SQUIRREL PETAURUS.

THIS beautiful little quadruped is an inhabitant of New South Wales, and is said to be very plentiful at the foot of the Blue Mountains, and is called by the colonists the sugar squirrel. Its fur is extremely soft and beautiful, and is occasionally made use of by the natives to form the scanty covering worn by some few among the least barbarous of the race. Could it be obtained in sufficient quantity, it would furnish a very elegant and delicate fur, and might form a useful branch of commerce in that distant and improving colony.

The squirrel petaurus during the day generally remains quietly nestled in the hollows of trees, but becomes lively as night advances, and skims through the air, supported by its lateral expansions, half leaping, half flying, from branch to branch, feeding upon leaves and insects. This peculiar mode of locomotion can scarcely be considered as a true flight, as the folds which serve the purposes of wings, seem more for the support of the animal in its long and desperate leaps, than for raising it in the air and directing its course. It has been doubted, however, whether these little animals are entirely destitute of the power of exercising their will in their flying leaps. The following anecdote bears upon this subject:—On board a vessel sailing off the coast of New Holland was a squirrel petaurus, which was permitted to roam about the ship. On one occasion it reached the mast-head, and as the sailor, who was dispatched to bring it down, approached, made a spring from aloft to avoid him. At this moment the ship gave

a heavy lurch, which, if the original direction of the little creature's course had been continued, must have plunged it into the sea. All who witnessed the scene were in pain for its safety; but it suddenly appeared to check itself, and so to modify its career that it alighted safely on the deck.

Two of these animals, in a state of captivity, remained during the day in a torpid state, rolled up in a bed of wool and soft hay. At night they became animated, and traversed their cage with great rapidity, leaping from one part to another, and gambolling in the exuberance of a sportive disposition. At the same time they were timid, and by no means remarkable for intelligence.

In size this animal is about equal to the common squirrel; and its tail is rather longer than its body. Its colour is grey above, somewhat darker on the head, and white beneath. A black line passes from the point of the nose, along the back, towards the tail, and the lateral folds of the skin are bounded in front and on the sides by a similar band, which mixes gradually with the grey of the body; the outer margins of those expansions are tinged with white. The eyes are full and large.



SUN BIRD.

SUN-BIRD.

THE sun-birds are closely allied to the humming-birds, whom they resemble in many parts of their economy, though they differ in some essential parts of their structure, so as to be placed by naturalists in a different family. Like the humming-birds, they inhabit the tropical parts of the world, being found in the central regions of Asia and Africa, as well as in some parts of South America, and the adjacent islands.

Among the different members of the family of the sun-birds, we find a very great contrast of species, and also a very considerable variety of form; the latter chiefly occurring in the shape of the tail, which is either generally even, much elongated, and wedge-shaped, or with the two central feathers only lengthened and narrow. The wings are rather rounded, the four quill feathers being rather short, and the plumage is most brilliant. In most of the species the crown of the head and the feathers on the throat have on them a patch of metallic lustre, and the breast banded with some bright shades of intense blue, red, or yellow. It is difficult to know which to choose among so many, where each, on being examined, seems almost more beautiful than the other; but the one figured is, as will appear, well worthy of delineation.

The scarlet-bellied sun-bird has the whole of the crown and the back part of the head green, with reflections of gold-colour; the cheeks, and the parts about the ears, black; the sides of the neck, the nape, and the greater wing coverts, rich purple red; the lesser wing coverts,

green, similar to the patch on the crown; the lower part of the back, and the upper tail coverts, rich metallic olive-green, with reflections of purple. The tail is black; the chin, throat, and fore part of the neck, purple of a splendid hue; the lower part of the breast, scarlet; and the under tail coverts green.

“Who can paint like nature?
Can imagination form, amid her gay creation,
Hues like these?”

The sun-birds, like their neighbours in classification, the humming-birds, are almost constantly busy in inserting their long and curved bills into flowers, to sip the sweets on which they subsist. Great numbers of them are to be seen about the open blossoms, on which they alight, but do not poise themselves, as the humming-birds do.

In the structure of their nests the sun-birds also exhibit some degree of difference from the humming-birds, many of them building in the crevices and hollow parts of trees, and others in thick bushes. They are formed of the softest part of the down of plants, and covered on the outside with lichens and fine mosses. Mr. Jerdon thus describes one which was built close to his house in India. He says that it was commenced on a thick spider's web, by attaching to it various fragments of paper, cloth, straw, grass, and other substances, till it had secured a firm hold of the twigs to which the web adhered, and the nest, suspended on this, was then completed by adding other fragments of the same materials; the entrance being at one side, near the top, and a slight projecting roof or awning over it.



BEAVER.

BEAVER.

THE beaver is one of the most wonderful animals in existence. It was formerly an inhabitant of England, and the names of some places are still in existence as a record of the fact, as, for instance, Beverley, in Yorkshire, formerly, it is believed, spelled Beverlac, or the lake of beavers; Bevere, in Worcestershire, and perhaps others.

“The beaver forms one of that class of animals which are called amphibious, that is, capable of living both on land and in water; all such, however, we find are more attached to the water, and generally make for it when pressed by any danger. The beaver is the only creature, among quadrupeds, that has a flat broad tail, covered with scales, which it uses as a rudder in the water. Its toes are webbed, which enables it to swim with great facility. It is about three feet long, and nearly one foot high.

It is found in the northern parts of Europe, Asia, and America; but it is chiefly in the latter where it has been last discovered that its instincts are most strongly marked—where they erect habitations with wonderful ingenuity and regularity. They cut with surprising ease large pieces of wood, which they fix on the ground at a small distance one from the other, filling up the interstices with clay. Having thus formed a dam against the violence of the stream, they next construct their apartments; the inside of which they plaster with great neatness; then they bring forth their young, and live in families; and here also they lay up wood, cut into billets of

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convenient size for their consumption at their leisure.

These stores are larger or smaller in proportion to the number in family. The logs are not thrown up in one continual pile, but laid one across the other, as chandlers pile their bars of soap, in order to take out, with the greater facility but just such a quantity as they shall want for their immediate consumption, and those parcels only which lie at the bottom in the water, and have been duly steeped. This timber is cut again into small particles, and conveyed to one of their largest lodges, where the whole family meet to consume their respective dividends, which are made impartially, in even and equal portions.

Such as are used to hunt these animals know perfectly well that green wood is much more acceptable to them than that which is old and dry; for which reason they plant a considerable quantity of it round their lodgments; and as they come out to partake of it, they either catch them in snares or take them by surprise. In the winter, when frosts are very severe, they sometimes break a large hole in the ice; and when the beavers resort thither for the benefit of a little fresh air, they either kill them with their hatchets or cover the opening with a large substantial net. After this, they undermine and subvert the whole fabric; whereupon the beavers, in hopes to make their escape in the usual way, fly with the utmost precipitation to the water, and plunging into the aperture, fall directly into the net, and are inevitably taken."



GIANT EREVE.

GIANT BREVE.

THE various species of breves are natives of India and the adjacent islands, and Australia. They are remarkable for the vivid and strongly contrasted hues of their plumage; for the length of the legs; and the shortness of the erect tail. The predominant colour is metallic green, variegated with azure-blue, scarlet, and black; and some species, with a hood of the latter tint, appear to be confined to Australia and the neighbouring islands of the Indian Sea. The ant-thrushes, principally confined to Tropical America, represent the breves in that portion of the world, but differ from those splendid birds in having an abruptly-hooked and strongly-toothed bill, and soberly-coloured plumage.

The utility of the ant-thrushes in their native regions is thus commented upon by Mr. Swainson:—"Of all the tribes of insects which swarm in the tropics, the ants are the most numerous; they are the universal devastators, and in the dry and overgrown forests of the interior, the traveller can scarcely proceed five paces without treading upon their nests. To keep these myriads within due limits, a wise Providence has called into existence the ant-thrushes, and has given to them this particular food. Both are proportionate in their geographic range, for beyond the tropical latitudes the ants suddenly decrease, and their enemies, the ant-thrushes, totally disappear.

The giant breve in size is equal to a magpie, but the tail is short and squared, and the wings cover it entirely. A very brilliant azure-blue covers the back,

and the tail; a less vivid tint is spread over the wings, the quills of which are black, coloured with azure towards the tip; top of the head, nape, and a streak on the lower part of the neck, black; feathers of the front and eyebrows, ashy brown; throat, whitish; an ashy brown tint is spread over all the lower parts; the feet are very long, and of a horny ash-colour; total length, nine inches.



LYNX.

LYNX.

THIS animal, which belongs to the tiger or cat tribe, is a very abundant one in the southern districts of Europe and the northern parts of Asia and America. It is a savage wild animal, and very difficult indeed to tame. It has bright eyes and a mild aspect, by no means corresponding with its real character. It is, we see, in animals as in human beings, that we must not always—nay we never should judge by appearances only, for they are often most fallacious, and if we trust only to them in forming a judgment, we shall most assuredly very often be led wrong in our conclusions. This animal is on the whole very lively and sprightly, so much so, indeed, that any one who is more than ordinarily quick and sharp-sighted, is called from it a lynx-eyed person.

“The usual length of the common lynx is about four feet and a half from the nose to the tail; or five feet including the tail; and its height, one foot and four inches. The fur is long, thick, and soft, of a greyish ash-colour on the upper parts, with a reddish tinge, marked with dusky spots, which differ much according to the age of the animal, as sometimes they are scarcely visible; and the under parts are white. The legs and feet are thick, short, and strong, covered with long fur; and the tail black at its extremity. The ears are erect, and have a long tuft of black hair at the tip; and the eyes are of a pale yellow, and have nothing extraordinary about their appearance, to give the slightest support to the assertions of the ancients; namely, that the lynx

could see through a stone wall or a rock with the utmost ease, and without the use of spectacles."

The lynx "advances by leaping and bounding, and will scale the loftiest trees; so that neither wild cat nor squirrel are more secure than the stag or the hare. He always fixes on the throat of the animal, and when he has sucked the blood, leaves the carcass; thus revelling in destruction, and doing immense mischief among the weaker or more harmless inhabitants of the forest." Lynxes conceal themselves in the thick parts of dense woods, and prey not only on the animals which are there to be found, such as the stag, the roebuck, sheep, hares, and others, but also ascend with facility the highest trees, and there capture the nimble squirrels, and even birds.

"In captivity they are remarkably irritable, and are seldom thoroughly tamed. The softness and warmth of the fur renders it a valuable and extensive article of commerce."



SHRIKE

SHRIKE.

THERE are only two species of shrike found in this country, the great ash-coloured shrike, and the red-backed shrike; the latter is much the more common of the two, being far from unfrequent in the south of England, where it is a summer visitant. The former is a rare bird, but is occasionally met with in the more northern districts in the winter.

Both of these species, as well as others of the same genus, have the extraordinary habit of fixing their food, which for the most part consists of insects, on a thorn on a hedge before they eat it.

The weight of this species rather exceeds two ounces; length, ten inches; breadth, fourteen; the bill is black, strong, and much hooked at the end; irides, dusky; the mouth beset with strong bristles—from the base of the upper mandible to the eye a black stripe. The plumage of the whole upper part is a pale ash-colour, except the scapulars, which are white; the coverts of the wings, black; quill feathers, black, with a white bar across their middle, and many of them tipped with white; the under parts, from chin to tail, white. The tail consists of twelve feathers of unequal length, which gives it a wedge-formed shape; the two middle ones are black, the next slightly tipped with white, on the rest the white gradually increases obliquely to the outer feather, which is only black at the base; legs, black. The female differs chiefly in the under parts, which are of a dirty white, marked with numerous semicircular brown lines.

"I could never observe," says Mr. Knapp, "that this bird destroyed others smaller than itself, or even fed upon flesh. I have hung up dead young birds, and even parts of them, near their nests, but never found that they were touched by the shrike. Yet it appears that it must be a butcher too, and that the name 'lanius,' bestowed on it by Gesner, two hundred and fifty years ago, was not lightly given. My neighbour's gamekeeper kills it as a bird of prey, and tells me he has known it draw the weak pheasants through the bars of the breeding-coops; and others have assured me, that they have killed them when banquetting on the carcass of some little bird they had captured. All small birds have an antipathy to the shrike, betray anger, and utter the moan of danger, when it approaches their nests. I have often heard this signal of distress, and, cautiously approaching to learn the cause, have frequently found that this butcher-bird occasioned it. They will mob, attack, and drive it away, as they do the owl, as if fully acquainted with its plundering propensities. Linnæus attached to it the trivial epithet 'excubitor,' a sentinel; a very apposite appellation, as this bird seldom conceals itself in a bush, but sits perched on some spray, in an open situation."



FASCICULATED PORCUPINE.

THIS animal is a native of the Malayan peninsula, and is also found in Sumatra. "Porcupines," says Mr. Hodgson, "are very numerous and very mischievous in some parts of India, where they depredate greatly among the potatoe, and other tuberous or edible-rooted crops. They are most numerous in the central region, but are common to all three regions. They breed in spring, and usually produce two young about the time the crops begin to ripen. They dwell together in pairs, in burrows of their own formation. Their flesh is delicious, like pork, but much more delicately flavoured; and they are easily tamed, so as to breed in confinement. All tribes and classes, even high-caste Hindoos, eat them; and it is deemed lucky to keep one or two alive in stables, where they are encouraged to breed. Royal stables are seldom without at least one of them."

This species differs from the common porcupine by having little or no crest. The spines commence upon the back of the head, where they are little more than an inch in length, and extend to the root of the tail, occupying nearly the whole of the back and sides: the longest are scarcely more than from four to five inches in length. They are mostly white at the base, and black towards the extremity. A few slenderer spines are occasionally intermixed with the others. The entire length of the body is little more than a foot, and the tail about five inches.

In common with the rest of its tribe, the fasciculated porcupine, in confinement, sleeps during the day, and

becomes, in some degree, active only on the approach of night. Its intelligence is equally limited, and its manners equally fretful, with those of the common species. Like it, it raises its spines when irritated or disturbed, stamps with its feet upon the floor of its cage, and swells and looks big in its defensive armour.

Dr. Bashman, who kept a porcupine in confinement for some time, relates that upon one occasion it made its escape into his garden, and when there, was attacked by a large mastiff belonging to a neighbour. At the moment of attack, the porcupine, by raising its spines and long fur, appeared suddenly to have become twice its usual bulk. It gave the dog a lash with its tail; the dog immediately retreated, and commenced howling; its nose, mouth, and tongue so beset with the porcupine's spines, that it could not close its jaws. These spines were immediately extracted, but the dog's head was very much swollen for some weeks afterwards, and it was two months before it fully recovered.



RUBY-THROATED HUMMING-BIRD.

RUBY-THROATED HUMMING-BIRD.

THIS is an American species, and a beautiful one, where all are beautiful. "Never was I more excited to wonder than by one of these little creatures," says Captain Head, in his "Forest Scenes;" so much more resembling a splendid shining insect than a bird. It was on a fine day at the commencement of an American summer, on the banks of Lake Huron, that I first beheld them. Beautiful birds were drinking, and splashing themselves in the water; and gaudy butterflies, of a very large size, were fanning the air with their yellow and black wings. At this moment a little blazing meteor shot, like a glowing coal of fire, across the glen; and I saw for the first time, with admiration and astonishment, what in a moment I recognised—that resplendent living gem, the humming-bird!"

A very complete account of this species is given by Wilson, the celebrated American ornithologist, who informs us that the humming-bird usually arrives in Pennsylvania about the 25th. of April, and about the 10th. of May begins to build its nest. This is generally fixed on the upper side of a horizontal branch, not among the twigs, but on the body of the branch itself. The branch is seldom more than ten feet from the ground. The nest is about an inch in diameter, and as much in depth. The outward coat is formed of small pieces of a species of a bluish grey lichen, that vegetates on old trees and fences, giving firmness and consistency to the whole; within this are thick matted layers of the fine wings of certain flying seeds, closely laid together.

The following is part of the description of this lovely little bird, as given by Wilson:—"The humming-bird is three inches and a half in length, and four and a quarter in extent; the whole back, upper parts of the neck, sides under the wings, tail coverts, and two middle feathers of the tail, are of a rich golden green; the tail is forked, and, as well as the wings, of a deep brownish purple; the bill and eyes are black; the legs and feet, both of which are extremely small, are also black; the bill is straight. But what constitutes the chief ornament of this little bird, is the splendour of the feathers of his throat, which, placed in a proper position, glow with all the brilliancy of the ruby."

"The humming-bird," says Bishop Stanley, "is extremely fond of tubular flowers; and I have often stopped with pleasure to observe his manœuvres among the trumpet-flowers. When arrived before a thicket of these that are full blown, he poises, or suspends himself on the wing, for the space of two or three seconds, so steadily that his wings become invisible, or only like a mist, and yet, can plainly distinguish the pupil of his eye looking round with great quickness and circum-spection; the glossy green of his back, and the fire of his throat, dazzling in the sun, form altogether a most interesting appearance. He is one of the few birds that are universally beloved."



CRAB-EATING MOOSE.

CRAB-EATING OPOSSUM.

THERE are several species of these somewhat singular animals, as for instance the one before us, the marmose opossum, the Mexican opossum, the flying opossum, and the common opossum. The following is the generic description:—"Animals of this genus have a lengthened head, with a large mouth, containing fifty teeth, and on the upper lip numerous long divergent whiskers; their ears are large and naked; their tail shorter than the body, prehensile, and for the most part covered by scales, intermingled with bristles; the colour of the fur is whitish grey. The limbs are short, with five toes on each, the fore ones armed with claws; on the hinder there are opposable thumbs, without nails, which give them the power of hands. Their walk is slow and clumsy on the ground; but they are expert at climbing trees, and in all their movements among the branches, where they most commonly reside.

Their food consists of birds, eggs, small animals, and insects; and by simply curving its tail at the extremity, the opossum sustains his weight, and depending from the branch of a tree or any other projection, hangs in full security, rifles the birds' nests, gathers fruit, or seizes any prey within its reach; and to regain his position, a little contraction of the tail easily throws him up, or if any lesser animal happen to pass underneath, he drops upon it with unerring aim, and quickly devours it. He is also guilty of stealing into the poultry-yard, where he commits great devastation, cutting the throats of the fowls, and sucking their blood, and

destroying more than he can eat.

His habits are nocturnal, and he is therefore hunted on moonlight nights. When about being seized, he will drop from the branch, and feigning himself dead, will lie still among the long grass, where he cannot easily be discovered, and thus escapes. Even if caught, he still continues to feign a death-like appearance, till deceit can be no longer of any avail; and so expert is he at this trick, that "He is playing opossum" has become an American proverb, to denote a dissembler.

The opossum is hunted by the Americans, for the sake of its flesh and its fat, both of which are useful.



SUMMER DUCK

SUMMER DUCK.

"THIS most beautiful of all our ducks," says Wilson, "has probably no superior among its whole tribe for richness and variety of colours. It is called the wood duck, from the circumstance of its breeding in hollow trees; and the summer duck, from its remaining with us, (the Americans,) chiefly during the summer."

The summer duck seldom flies in flocks of more than three or four individuals together, and most commonly in pairs, or singly. Their food consists principally of acorns, the seeds of wild oats, and insects.

This elegant bird has often been tamed, and soon becomes so familiar as to permit one to stroke its back with the hand. A Mr. Nicholls had a whole yard swarming with summer ducks, which he had tamed and completely domesticated, so that they bred, and were as familiar as any other tame fowls.

Among other gaudy feathers with which the Indians ornament the calumet, or pipe of peace, the skin of the head and neck of the summer duck is frequently seen covering the stem.

The eggs, twelve or thirteen in number, are of an exact oval shape, less than those of the common hen, the surface exceedingly fine-grained, and of the highest polish, and slightly tinged with yellow; greatly resembling old polished ivory.

The wood duck is one foot seven inches in length, and the wings measure two feet four inches in extent. The bill is red, margined with black; a spot of black lies between the nostrils, reaching nearly to the tip, which

is also of the same colour, and furnished with a large hooked nail, or tooth as it is sometimes called. The eye is of an orange red colour; the forehead, crown of the head, and the crest, which is pendent, is of a rich glossy bronze green, ending in violet, elegantly marked with a line of pure white, running from the upper part of the bill over the eye, and with another band of white proceeding from behind the eye, both mingling their long plumes with the green and violet ones, producing a rich effect; chin, throat, and collar round the neck, pure white. The breast is dark violet brown, marked on the fore part with minute triangular spots of white, increasing in size until they spread into the white of the lower part: each side of the breast is bounded by a large crescent of white, and that again by a broader one of deep black. The sides under the wings are thickly and beautifully marked with fine undulating parallel lines of black, on a ground of yellowish drab; the back is dusky bronze, reflecting green; the tail glossy green above, and dusky beneath; the legs and feet yellowish red; the claws strong and hooked.

The summer duck has been but rarely killed in England.



SILKY TAMARIN.

SILKY TAMARIN.

THIS neat little animal is a native of Guiana and Brazil. It is often brought to Europe, where its beauty, mild temper, and gentleness, render it a great favourite. These animals, from the delicacy of their constitution, cannot be kept alive in this country without the greatest care to preserve them from the influence of atmospheric changes, and especially from the cold and humidity of the winter season: under the depressing effects of wet and chilly weather, they lose all their sprightliness, droop, and die. They shew a liking for milk, boiled rice, Indian corn, and other grain; but prefer ripe fruits, as more in unison with their natural food.

One kept in confinement, was very active and lively, and, like a bird, preferred the topmost perches of the cage. When descending, which was done but rarely, it always climbed down backwards; it never walked upright, and its tail was always hanging down. On the least alarm, it always concealed itself; and though it appeared gratified with the notice and caresses of those whom it knew, and came to them when called, it never returned any expressions or signs of attachment as other monkeys do, when noticed by persons to whom they are attached. It disliked strangers, and retired from them, regarding them with looks of defiance, and menacing with its feeble teeth. Fear or anger it expressed by a short sharp whistling cry, but sometimes, as if from ennui, it raised its voice into a louder and more prolonged note.

Little is known of their native habits; but in its native forests, of which it is one of the ornaments, it

is thought that they live a good deal in the manner of the squirrels, and that they remain almost constantly on the trees; bounding with rapidity from tree to tree, uttering sharp but weak cries of alarm, and apparently dispersing at the first appearance of strangers.

The silky tamarin scarcely measures, in total length, two feet, of which the tail alone occupies one. The fur is long, silky, and of a golden yellow; the hairs of the head long and falling, parted down the middle of the crown by a line of rust-brown hairs; ears concealed by the long hair of the head; tail rather bushy at its extremity. The gloss upon the fur is particularly rich when held in the sun.



EMERALD BIRD OF PARADISE.

EMERALD BIRD OF PARADISE.

THE birds of paradise, says M. Lesson, the eminent naturalist, or at least the emerald, the only species concerning which we possess authentic information, live in troops in the vast forests of the country of the Papuans, a group of islands situated under the equator, and which is composed of the islands Arou, Wagiau, and the great island called New Guinea. They are birds of passage, changing their quarters according to the monsoons. The females congregate in troops, and assemble upon the tops of the highest trees in the forests.

The following is the description given of the species before us:—The body, both above and below, is of a brown colour, covered in front with close-set velvet-black feathers, shot with emerald green. The crown of the head and the upper part of the neck is light yellow; and the upper part of the throat golden green; the front of the neck, brown, with a tinge of violet blue. The sides of the bird are adorned with bundles of very long plumes, with loose filaments of yellowish white, slightly spotted towards the end with purple red. These plumes are so long that they extend considerably beyond the end of the tail. Two long curved shafts also, furnished with stiff hairs, spring from each side over the tail, and extend to a length of nearly two feet. The bill is horn-colour, and the feet lead colour. The whole length, from the tip of the bill to the end of the tail, is about one foot one inch.

Soon after our arrival, says the same author, speaking

of the country of Guinea, I was on a shooting excursion. Scarcely had I walked some hundred paces in those ancient forests, the daughters of time, whose sombre depth was perhaps the most magnificent and stately sight that I had ever seen, when a bird of paradise struck my view. It flew gracefully, and in undulations; the feathers of its sides formed an elegant and aerial plumage, which, without exaggeration, bore no remote resemblance to a brilliant meteor. Surprised, astounded, enjoying an inexpressible gratification, I devoured this splendid bird with my eyes; but my emotion was so great that I forgot to shoot at it, and did not recollect that I had a gun in my hand till it was far away.

It is at the rising and setting of the sun that the bird of paradise goes to seek its food. In the middle of the day it remains hidden under the ample fold of the teak tree, and comes not forth. It seems to dread the scorching rays of the sun, and to be unwilling to expose itself to the heat.

One of the best opportunities of seeing this splendid bird in all its beauty of action, as well as display of plumage, is early in the morning, when he makes his toilet; the beautiful plumage underneath the wing is then thrown out, and cleaned from any spot that may sully its purity by being passed gently through its bill; the short chocolate-coloured wings are extended to the utmost, and he keeps them in a steady flapping motion, as if in imitation of their use in flight, at the same time raising up the delicate long feathers over the back, which are spread in a chaste and elegant manner, floating like films in the ambient air.



COATI.

COATI.

THE coatis, or coati-mondis, as they are generally called, are natives of the warmer parts of the American continent; they approximate to the racoons in their general habits, and were formerly placed by Linnæus among the weasels. "In captivity," says Linnæus Martin, "these animals sleep much during the day, and are most active as the evening advances, at which time they traverse their cage, turn their snout from side to side, and pry into every corner. They do not, however, pass the whole of the day in sleep, but are active for hours together, retiring to rest only at intervals.

In drinking, the coati laps like a dog; but, as its long snout would be in the way during this operation, it turns it up, so as to prevent its being submerged.

These animals are highly gifted with the sense of smell; they examine everything with their long nose, which is in almost perpetual motion. Their temper is irritable and capricious; they cannot be trusted, even by those with whose persons they are the most familiar, and, consequently, are not to be touched without great caution; we have, however, seen some individuals tolerably good tempered, but most are savage, and their bite is very severe. Their voice, seldom exerted, is, under ordinary circumstances, a gentle hissing; but when irritated or alarmed, they utter a singularly shrill cry, something like that of a bird. They defend themselves vigorously when attacked by a dog, or any animal, and inflict desperate wounds. Like the racoon, they are said to be fond of the juice of the sugar-cane, but we

know not on what authority. Azara does not allude to this partiality; it is, however, far from being improbable. In climbing they descend head foremost, being in this respect unlike the bear, which animal they far surpass in activity, being indeed better climbers than even the cat, and exceeded among their own tribe only by the kinkajou, whose prehensile tail gives it a great advantage. In their native climate they tenant the woods, living for the most part in small troops among the trees, which they climb with great address, and prey upon birds, which they surprise, rifling also their nest of eggs, or the unfledged young."

In colour, different individuals of this species vary very considerably, the general brown colour being more or less tinged with yellow, and in some shaded with black. The tail is ringed with black and yellow, and is naturally longer than the body, but is not unfrequently shortened by the animal itself eating off a considerable portion of the end of it. The proverb truly says that there is no accounting for tastes; and the writer himself once knew a little terrier dog to devour the end of its own tail immediately after it had been chopped off.



BLUE TITMOUSE.

BLUE TITMOUSE.

THIS is one of our commonest British species of this genus of birds, of which we have several kinds in this country, namely, the great titmouse, the long-tailed titmouse, the crested titmouse, the cole titmouse, the marsh titmouse, and the blue titmouse—the one before us.

All of these birds are alike in their habits, so that in a general description of one, we have a description of all, except as regards their plumage.

The blue titmouse is one of the most beautiful of our native species, and may be seen in the winter season on almost every hedge; it frequents also gardens and orchards, and, being a bold and fearless bird, affords abundant opportunities for examination of its habits. It is ever active, ceaseless, and restless in its prying search for food among the buds and blossoms of trees, where the insects, on which it feeds, lie concealed, and assumes an endless variety of interesting and amusing attitudes.

“In winter the blue titmouse resorts to stack-yards, where it finds both food and shelter, nestling at night in holes about the sides or under the thatching of hay or corn-stacks, and puffing out its feathers, so as to resemble a ball of down. This species lives in holes of trees or walls, and forms its nest of mosses, lined with feathers and hair; its eggs, from six to eight in number, are white, spotted with brown, especially at the larger end. These birds resolutely defend their nests against intruders, and if an attempt be made upon it, bite with great severity, ruffling up their soft full plumage, and hissing like a snake or angry kitten, thereby often

detering the school-boy from carrying his intentions into effect." This is, however, only the natural and most laudable spirit shewn by the parent bird in defence of its nest and young; and shews how cruel it is to rob birds of that for which they have so strong and natural affection.

These birds often build their nests in the most singular situations. Not unfrequently the top of a pump is made use of, and even, though the pump may be constantly worked, the bird does not quit the situation she has chosen. Bishop Stanley says of one instance of the kind, "It happened that during the time of building, and laying the eggs, the pump had not been in use; and when again set going, the female was sitting; and it was naturally supposed that the motion of the pump handle would drive her away. The young brood, however, were hatched safely, without any other misfortune than the loss of a part of the tail of the sitting bird, which was rubbed off by the friction of the pump handle."



HARNESSED ANTELOPE

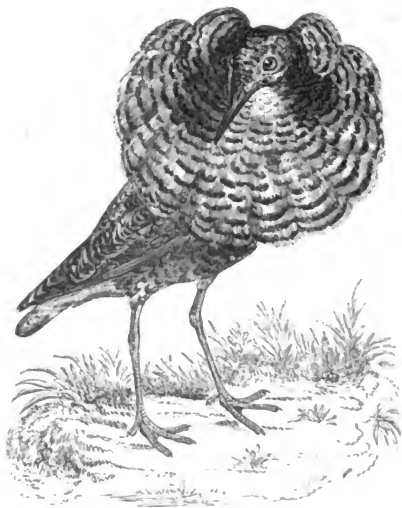
HARNESSED ANTELOPE.

THIS is one of the most beautiful of the antelope tribe, the general ground colour of the body being a bright fulvous, streaked with lines of white, giving the animal somewhat of the appearance of the camelopard.

The harnessed antelope is about the same size as the fallow deer; the horns are black, and about seven inches in length. "This beautiful species," says Mr. Fennell, in his "History of Quadrupeds," "inhabits the woods at the sides of the Senegal, Niger, and Gambia rivers; but, as with several other antelopes, very little is known of its habits. Its full length is four feet and a half; its height at the shoulders is two feet six inches, but it is rather higher at the croup. The ground colours are fawn and white variously marked; along the back there is a stripe of white and black mixed, and from this stripe sometimes a greater or smaller number of white streaks pass backwards and downwards, and are crossed by longitudinal ones of the same colour, nearly parallel to the ridge of the back, and giving the animal the appearance of being in harness. But this uniform marking is not always present; and it is said that no two specimens are marked exactly alike. The male only has horns, which are straight, but wreathed with two ridges in the form of a double screw, prominent at the base, but becoming obliterated near the tips."

This animal appears to be rare, at least in those parts of the continent of Africa in which it has been met with, namely in Senegal, in the county of Podor, about sixty leagues inland from the sea, and in Caffraria,

according to Lichtenstein; but Burchell did not meet with it there. It is, however, far from improbable that it may be plentiful in some parts of the vast interior of that little-known part of the world, to which no traveller has ever yet made his way, and in endeavouring to attain to which, so many have lost their lives.



RUFF.

RUFF.

THE ruff is a very singular bird in its appearance; certainly one of the most so that we have in this country. It is chiefly remarkable for the ruff-like circlet of feathers round its neck, from whence it derives its name. It is also remarkable in another respect, namely, that no two individuals are alike in the colouring of their plumage in this part. Moreover, the female, called the reeve, is without the ruff, which therefore only distinguishes the male bird.

Owing to the great demand for these birds for the table, and for preservation of the stuffed skin, the abundant use of guns, the invasion by population of their haunts, and, perhaps, the drainage of the marshy vicinage of some parts of the coast, they are become far less numerous than they used to be, especially in ancient times, when they were very abundant.

The prevailing colour of the plumage of the ruff is brown, inclining in some specimens to rufous, and in others to grey.

The ruff is so pugnacious that Linnæus conferred upon him the surname of 'the warlike.' Their contests are frequent and mortal; and, so intent are they on mutual destruction, that they allow the fowlers to take them in nets rather than desist. Even in confinement, they evince their untameable animosity; nor is it till they are fairly matched that they become peaceable and sedate.

This bird weighs seven ounces, and is one foot in length. They nestle in tufts of grass in fens, and have four white eggs, marked with rusty spots. They are

fattened for sale, but the people who fatten them must keep them shut up in dark apartments; for if the least light were admitted, the turbulent things would instantly attack each other, nor cease till one fell, "especially," as an old naturalist tells us, "if anybody stands by." These birds belong to the north of Europe, and such of them as visit Britain, are chiefly to be found in the breeding season in the fens of Lincolnshire.

How unamiable does a quarrelsome disposition appear even in a bird. How much more beloved is the tender dove, the emblem of peace and of the gracious gifts of the Holy Spirit of God, than any that are of a contrary mood. How well would it be for all if they would follow the instructions of God's most holy word, in this as in all other respects, and "seek peace and ensure it," "follow peace with all men, and holiness, without which no man shall see the Lord."



RATEL.

THE ratel is a native of the Cape of Good Hope, from whence it is frequently known by the name of the Cape ratel.

The height of this animal is about ten or twelve inches, and its length two feet and a half. The fur is rather smooth, though strong, and, according to Sparrman, the skin is so exceedingly tough that "if any body catches hold of him by the hind part of his neck, he is able to turn round, as it were, in his skin, and bite the arm of the person that seizes him." This is most probably an exaggeration, but it is quite certain that its hide is astonishingly tough and impenetrable, so much so, "that it is said a pack of dogs, sufficient in number to overcome a moderate-sized lion, have sometimes failed in their attack upon a ratel. The crown of the head is of a whitish grey colour; and, from the back of the head to the root of the tail, the upper surface of the body is of a dull ash grey, which colour strongly contrasts with the jet-black of the under parts of the animal. It has no external ears, but merely a slightly elevated margin surrounding an auditory aperture. The legs are short and stout, and the feet have five toes, surmounted by arched un retractile claws, which are grooved beneath, and those of the fore-feet are about an inch and a half in length, being longer than those of the hinder pair, and well adapted for digging." It is the opinion of Sparrman, and indeed of all subsequent travellers, that the ratel subsists entirely on bees, whose nests it plunders; and though there is some reason to suppose that it may eat

other food, yet it is not certain. They are fond of climbing, but perform this operation in a clumsy manner, although they will ramble securely along every arm of a branching tree, provided it is sufficiently strong to bear their weight. They sleep much during the day, but become watchful at night, and manifest their uneasiness by a hoarse call or bark, proceeding from their throat.

The same traveller also relates, on the authority of the Hottentots and the Dutch colonists, that at sunset, the time at which the ratel seeks its food, it sits up on the ground, and raising one of its paws to shade it from the rays of the sun, it looks out carefully on either side, watching the flight of the bees until it perceives many flying in one direction; these it watches carefully, and then follows to their nest, which is generally placed in some hole in the ground. Probably the thickness of its skin now stands it in stead, and prevents it from feeling the stings of the bees infuriated by the destruction of their habitation. It is also said that the ratel at times discovers bees' nests by watching the flight of the honey-cuckoo.

At times it is reported to be so savage as to attack a man, but the nose is its weak point, and it is easily killed by a blow on it.



BOAT BILL.

BOAT-BILL.

THIS singular-looking bird is so called from the curious shape of its bill, which bears, as will be seen, some slight resemblance to a boat with its keel upwards.

It is a native of Guiana, Brazil, and other parts of the continent of South America, and is said to be of recluse and solitary habits; but little, however, is known of the lesser details of its natural history. It frequents marshes and rivers, fens and swamps, and in its mode of life resembling the heron, to which it is allied, and among which birds it is accordingly classed by naturalists; perched on some branch overhanging the water, it watches patiently for the approach of any fish on which it can drop, and on which it accordingly plunges somewhat after the manner of the kingfisher. It has also been supposed to feed on crabs, from which is derived one of its Latin generic names, but it is not by any means certain that this is the case. Leach however says, in his "Zoological Miscellany," that it feeds on fishes, worms, and crustacea; in search of which it is found frequenting the borders of the sea. Lesson, on the other hand, the celebrated French naturalist, says that it perches on trees by the sides of rivers, from which it pounces on fish, which are its food, and not crabs. It is common, he says, in the flooded savannahs of South America.

Some years since one of these birds was exhibited alive in London, at Exeter Change. It had the dismal look of the rest of the heron tribe, and was fed on fish. The bill of the heron is long, straight, compressed, and pointed, and in the form of this part the boat-bill

differs from those birds, being of an oval form, much depressed, with a ridge along the upper mandible, which somewhat resembles an inverted spoon, and to which the lower mandible, of nearly the same figure, is applied—rim in contact with rim. It is in fact the bill of a heron, shortened and flattened out laterally. The toes are three before and one behind; the legs of moderate length.

“In the male, from the top of the head arises a long plume of jet-black narrow feathers, pointed and falling down upon the back, producing a beautiful effect. The throat is bare; the forehead and neck, of which latter the feathers are elongated, and form a sort of mane, very characteristic of the herons, are greyish white. The back, also ornamented with long feathers, is of a fine grey, sometimes with a rusty tinge; the tail is white, the sides are black, the middle of the under surface deep reddish brown; bill, blackish; legs, brown; claw of middle toe pectinated.

In the female, the feathers of the top of the head are black, without being elongated into a pendent crest. In size this bird somewhat exceeds a common duck, but, with the exception of the beak, exhibits the general contour of the herons.”



LEMUR.

LEMUR.

THERE are more than a dozen species of the genus lemur. In the one before us the fur is varied with large patches of black, on a pure white ground; the hands and the feet are black, and a full white ruff surrounds the face. There is a specimen in the collection of the Zoological Society.

The tribe of lemurs are chiefly found in the great island of Madagascar, where they appear to take the place which monkeys hold in other countries, and of which they are, as it were, the representatives or substitutes.

Not much is at present known of their habits in their natural state; but in captivity they become exceedingly tame, fond of being noticed, and constantly climbing and leaping with surprising agility; and, being of a chilly nature, they delight in basking in the sunshine, or the warmth of a fire. When undisturbed, however, they roll themselves up into the form of a ball, and, with their long tails wound round their bodies, sleep in this position during a great portion of the day.

On account of the pointed noses of these animals, and their general resemblance to monkeys, they have been called fox-nosed monkeys. Mr. E. T. Bennett says, in describing them, "Their hands and feet are equally well formed for grasping with those of the monkeys, to which they approximate very closely in the more essential points of their internal structure; the fore-fingers of the posterior extremities have long subulate claws, while the nails of all the other fingers are flat; their eyes

are large and directed forwards. None of the group exceed two feet and a half in length, exclusive of the tail; and the greater number of them are scarcely more than half that size.

The word lemur means a ghost; and perhaps the name has been assigned to these animals from their appearing at night-time, when the latter is supposed to be seen. It is not indeed to be doubted, but the fact is certain, that it has pleased God in various instances, in former times, to permit those who have departed from the body to appear to those who have been still living on the earth; but in the great proportion of modern cases, or supposed cases, of such occurrences, the imagination of the ghost-seer has supplied the vision. The connexion between the visible and the invisible world is perhaps much closer than many at all think of, but God alone can draw the veil between the two.



YELLOW BUNTING.

YELLOW BUNTING.

THIS is one of the most abundant species of our British Birds, and is to be seen in every part of the kingdom, frequenting, for the most part, hedge-rows and the neighbourhood of cultivated fields and farm-yards.

The length of the yellow bunting is about seven inches. The male is a very handsome bird—the yellow on his head resembling often in brightness that of the canary, and the rest of his plumage is elegantly mottled, though of sober colours. The female has much less yellow about the head, and her colours are in general much less bright. The young birds have no yellow on the head until after their first moult in the autumn, and the head is patched with dusky black.

The yellow bunting, or yellow hammer, as it is also called, builds a compact and pretty nest, thus described by the poet Grahame, in his poem on the “Birds of Scotland:”—

“Up from that ford a little bank there was
With alder-copse and willows overgrown,
Now worn among by mining water-floods;
There, at a bramble root, sunk in the grass,
The hidden prize of withered field-straws form’d,
Well lined with many a coil of hair and moss,
And in it laid five red-veined spheres I found.”

The eggs are of a pale purple white colour, much streaked and speckled with dark reddish brown. The nest is usually placed either upon or very near the ground, at the foot of a hedge, or the side of a bank. It is compacted of roots, moss, or hair. In one instance

the yellow bunting has been known to lay her eggs on the ground without any nest; and in another a nest was placed at an elevation of seven feet from the ground, among the branches of a broom.

In winter these birds flock together with chaffinches, greenfinches, and others, and visit with them the stack-yard of the farmer, in quest of the grain which may there be picked up. In general they roost either on or very near the ground; but in severe weather they resort for shelter to bushes and evergreen shrubs. They are considered very good eating, as indeed grain-eating birds may be expected to be; and in Italy great quantities of them are caught, and sold for the table.

The note of this species is not a very musical one, being only one sound repeated a few times in quick succession, and then drawn out to a considerable length. The song is heard in spring and summer, especially during warm sunny days in June; and the male bird, who takes turns with the female in sitting on the nest, has been heard to sing while in that situation. The young are able to fly the first or second week in June, which is about a fortnight from the time of their being hatched. The yellow bunting is common throughout the whole of Europe.



KANGAROO.

KANGAROO.

THE kangaroo is a native of Australasia. But before describing the form and habits of this singular quadruped, we shall relate the circumstances attending its first discovery, as detailed by Dr. Shaw. This was in 1770, when the celebrated navigator, Captain Cook, was stationed for a short time on that part of the coast of New Holland which is now called New South Wales. "On Friday, June 22nd.," says Captain Cook, "a party who were engaged in shooting pigeons for the use of the sick of the ship, saw an animal which they described to be as large as a greyhound, of a slender make, and extremely swift." The following day the same kind of animal was seen by a great many other people. On the 24th. it was seen by Captain Cook himself; who, walking at a little distance from the shore, observed a quadruped, which he thought bore some resemblance to a greyhound, and was of a light mouse-colour, with a long tail, and which he should have taken for a kind of wild dog, had not its extraordinary manner of leaping, instead of running, convinced him of the contrary. Mr. Banks also obtained a view of it, and immediately concluded it to be an animal perfectly new and undescribed. Some time after, this gentleman, accompanied by a small party, had an opportunity of chasing two with his greyhound, which the kangaroo, by its bounding leaps over the high grass, soon outstripped. It was not long, however, before one was shot; and the scientific associates in this expedition of discovery were then fully gratified.

This curious creature, which is about the size of a large sheep, and is exclusively found in the country just named, presents one of the most extraordinary figures that occur among the class of quadrupeds. "Its head is small and gentle in appearance, with full bright eyes, a mouth not large, and pointed ears; its neck is slender and graceful; its shoulders narrow; and its fore limbs short, divided into five fingers with nails; the hinder are more than three times the length of the fore, with five toes, of which the two inner are small, and so united as to appear but one; the next is large, strong, and armed with a pointed hoof, no useless weapon of defence, outside of which there is one small claw.

In walking upon all-fours, it limps slowly along; but for speed or safety it depends entirely upon the strength of the hind limbs, bounding along with great velocity, and clearing at one spring obstacles nine feet high, or ravines of nearly double that width. Its food is entirely vegetable."

Though the kangaroo is of a most gentle and in-offensive nature, yet, if attacked, it defends itself with extreme courage, and often kills several of the dogs that attack it, either by a single kick of its powerful hoof, or with one blow of its formidable tail.

Kangaroos associate in troops. Their flesh, which is said to resemble venison, is much esteemed for the table; and they are valuable in this respect, attaining sometimes the weight of two hundred pounds.



WILD TURKEY.

WILD TURKEY.

THE turkey, so well known a bird in its domesticated state in our farm yards, is a native of America, and is believed to have been imported into Europe in the beginning of the sixteenth century. It obtained the name of 'turkey' from having been believed at the time to have come from that country; having, perhaps, as is imagined, been confounded with the Guinea fowls, which were naturalized in England about the same time, from the Levant.

Oviedo, in his "Natural History of the Indies," by which name America was called at first when newly discovered, speaks of it as a kind of peacock. Audubon, the great naturalist, and also the Prince of Canino give full and detailed accounts of the turkey to the following effect:—"The native country of this species extends from the north-western territory of the United States to the Isthmus of Panama, south of which it is not to be found. It was formerly common in many parts of Canada, as well as in districts within the States, whence it has been driven by the advance of colonization, and must now be sought for in remoter localities. The unsettled parts of the states of Ohio, Kentucky, Illinois, and Indiana, an immense country to the north-west of these districts, and the vast regions drained by the rivers, from their confluence to Louisiana, including the wooded parts of Arkansas, according to Audubon, are the most abundantly supplied with this magnificent bird. The wild turkey is to a certain degree, migratory in its habits, and associates in flocks during the autumn and winter

months. About the beginning of October, when the fruits and seeds are about to fall from the trees, these birds collect together and gradually move towards the rich lands of the Ohio and Mississippi. The males, or 'gobblers,' associate in parties varying from ten to a hundred, and search for food apart from the females; the latter, with their young broods, usually join each other, forming parties of seventy or eighty, and assiduously avoid the old males, which evince a disposition to attack and destroy the young till they are fully grown. The flocks of the district all move in the same direction, seldom taking wing unless to escape the hunter's dog, or cross a river, which latter feat is not performed till after some delay, during which they ascend the highest eminences, and strut about and gobble as if to raise their courage to a pitch befitting the emergency. Even the females and young assume at this juncture a pompous demeanour, spread out their tails, and 'pur' loudly.

When the weather is settled, and they themselves prepared, they take to flight for the opposite shore: the old and robust easily cross a river of the breadth of a mile, but the young and meagre birds often find their strength fail, and fall into the water, not however to be drowned, as might be imagined. They bring their wings close to the body, spread out their tail, stretch forward their neck, strike out vigorously with their legs, and rapidly make way to the shore."



FERRETES.

PERAMELES.

THE bandicoots, which are natives of the vast country of Australia, appear to take there the place of the shrews of the old world. In some respects they approach the kangaroos, but in others differ widely from them. In their movements these animals resemble a rabbit; they do not, like the kangaroos, bound from the hind limbs alone, but arching the back, proceed with a saltigrade gait, that is half-way between running and jumping; or rather by a succession of short leaps from the hind to the fore feet, but not with much speed, nor maintained for a great length of time. The kangaroos make considerable use of the tail, but in the bandicoots it is by no means so important an organ, though it assists them in sitting upright, an attitude usually assumed when eating, the fore paws being brought into use as holders, like those of the squirrel. With these paws they scratch up the earth in search of roots and insects; and it is said that the potato crops of the colonists in some districts suffer from their incursions. They are readily tamed, and in a few days become reconciled and familiar.

Ten species are now known: of these one is a native of New Guinea. The rabbit-eared perameles is found in the Swan River district of Western Australia, the only part of Australia in which it has hitherto been found. Mr. Gould states that this animal is tolerably abundant over the whole extent of the grassy districts in the interior of the Swan River colony, and is usually seen in pairs. It commonly selects those spots where, the soil being loose, it is enabled to excavate its burrows with facility.

Like the rabbit, it flies to its subterranean retreat for safety when pursued; and as the burrows are both deep and long, frequently eludes the pursuer. Its flesh is sweet, and resembles that of the rabbit.

A specimen kept in the menagerie of the Zoological Society, was very active in the evening, but usually slept during the day-time; when sitting upon its haunches, with its head thrust between its hind legs, it appeared like a large ball of fur. It was an exceedingly savage animal, bit very severely, and would not readily unfix its hold of any thing it happened to seize with its teeth.

The rabbit-eared perameles is about equal in size to the common rabbit, and has a remarkably long and pointed muzzle. The ears are of an elongate oval shape, sparingly covered with minute hairs. The eye is rather small. The fur of the animal is very long and soft; on the upper part of the body it is of a delicate grey hue; on the sides of a pale vinous tint, or red inclining to purple; and on the under parts white. The legs are dusky at the base, but white below; the feet are also white. The tail is rather shorter than the body of the animal, the middle portion black, and the end white.



FLAMINGO.

FLAMINGO.

THIS bird is well known by name: much better than it is by personal observation. When in full plumage, the whole colour is deep scarlet, except the quill feathers of the wings, which are black; the legs are longer than those of almost any of the wading birds, and the neck is as long and slender as the legs.

The flamingo is a shy and wary bird, and flies off on the least alarm. Dampier, however, by keeping himself out of sight, managed on one occasion to shoot fourteen at one shot. They keep drawn up in lines, like a regiment of soldiers, with sentinels posted for the sake of security.

M. de la Marmora, in his "Vogage to Sardinia," gives the following account of this singular bird:—"It quits Sardinia about the end of March, to return about the middle of August; then it is that from the bastion which forms the promenade of the inhabitants of Cagliari, flights of these magnificent birds may be seen to arrive from Africa. Disposed in a triangular band, they appear at first in the heavens like a line of fire; they advance in the most regular order, but at the sight of the neighbouring lake there is a pause in their progression, and they appear for a moment immoveable in the air; then tracing by a slow and circular movement—a reversed conical spiral figure, they attain the end of their migration. Brilliant in all the splendour of their plumage, and ranged in a line, these birds offer a new spectacle—they represent a small army ranged in order of battle, the uniformity and symmetry of which leaves nothing to

be desired; but the spectator should content himself with observing this peaceful colony from afar. Woe to him if he dare approach the lake at this deadly season."

The flamingo is occasionally met with in Italy, as also in other countries that border on the Mediterranean sea and the Caspian sea, and is common in the Cape de Verd Islands, and along the whole of the western coast of Africa.

The mode of incubation adopted by these birds is not a little curious; if its nest were constructed like that of birds in general, its long limbs would be continually in the way. The flamingo raises a nest, if nest it can be called, of mud, in the form of a hillock, and slightly concave at the top; here the female lays two large white eggs, and sits to hatch them, her legs hanging down on each side of this singular mound, and the toes just touching the earth at its base. It is also said that, when circumstances do not permit the formation of such a pyramid of mud, the bird avails itself of any natural bank, or ledge of rock.



PUMA.

PUMA.

THIS rather large animal of the feline, or cat tribe, may often be seen in Menageries and Zoological Gardens. It is extensively spread throughout the whole of the continent of North and South America, but is gradually becoming far less numerous than it was formerly when civilization had not so far advanced.

The upper parts of the puma are of a light fawn-colour, fading off into white beneath and on the inside of the limbs. The ears are black on the outside, especially at the base, and the end of the tail is the same colour. The whole length is about six feet, of which the tail measures two feet. The young are at first marked with dark brown streaks along the back, and with spots of the same on the sides, shoulders, and neck, but these markings gradually wear off with the age of the animal, and at length entirely disappear.

The puma is a very savage animal in its natural state, but, nevertheless, it is tamed without much difficulty. When domesticated, its manners closely resemble those of the common cat, showing its fondness at being caressed, by the same kind of gentle purring.

It can climb trees with great facility, and will watch the opportunity of springing on such animals as happen to pass beneath. In the day-time, however, it is seldom seen, the night being the time it selects for committing its depredations.

Sir Francis Head, in his "Journey across the Pampas," gives the following interesting narrative in proof of the fear of man which this animal, in common with others,

entertains. He received the account from a person who had himself been engaged in the affair. The puma, it should first be observed, is indiscriminately called a lion and a panther by the inhabitants of those parts:—"He was trying to shoot some wild ducks, and, in order to approach them unperceived, he put the corner of his poncho, (which is a sort of long narrow blanket,) over his head; and, crawling along the ground upon his hands and knees, the poncho not only covered his body, but trailed along the ground behind him. As he was thus creeping by a large bush of reeds, he heard a loud sudden noise, between a bark and a roar; he felt something heavy strike his feet, and, instantly jumping up, he saw to his astonishment, a large lion actually standing on his poncho; and perhaps the animal was equally astonished to find himself in the immediate presence of so athletic a man. The man told me he was unwilling to fire, as his gun was loaded with very small shot; and he therefore remained motionless, the lion standing on his poncho for many seconds: at last the creature turned his head, and, walking very slowly away about ten yards, he stopped and turned again: the man still maintained his ground, upon which the lion tacitly acknowledged his supremacy, and walked off."



GLYCA...

FLYCATCHER.

THIS neat, though plain-plumaged bird is a rare species in this country, being very local in its distribution. In the south of Europe it is very abundant, and great numbers are killed for the table.

The neighbourhood of Lowther Castle, in Westmoreland, is one of the places of resort of the pied flycatcher in our island, and they arrive about the middle of April. "The males, soon after their arrival, should the weather be favourable, will frequently sit for a considerable period on the decayed branch of a tree, constantly repeating their short, little-varied, though far from unpleasant song, every now and then interrupted by the pursuit and capture of some passing insect. Their alarm note is not very unlike the word 'chuck,' which they commonly repeat two or three times when approached, and which leads to their detection."

The following curious anecdote is related in the "Annals and Magazine of Natural History," for March, 1845, by John Blackwell, Esq., of Hendre House, Denbighshire, of a pair of pied flycatchers, which having built their nest close to the portico over the hall door, and which having been prevented by a swarm of bees from entering into the hole in which their nest was placed, the bees then stung their young ones to death. The parent birds returned in the month of April in the following year to the same place; but the bees still retaining possession, again assailed them, and compelled them finally to leave the spot, on which they entirely forsook the situation, and built a new nest in a neighbouring stone wall.

The following is the description of this species:—The length is nearly five inches; the bill, black; the eyes, hazel; and the forehead, white; the crown of the head, the back, and the tail, black; the coverts of the wings, dusky—the greater coverts being tipped with white; all the breast is white; the legs are black. The female is not so large as the male, and she is dark brown where he is black. She also is without the white mark on the forehead.

The flycatchers of the various kinds are not without their use in destroying numberless insects; and thus in the words of Buffon, “We see that all nature is balanced, and the circle of production and destruction is perpetual. The philosopher contemplates with melancholy this seemingly cruel system; but he is forcibly struck with the nice adjustment of the various parts, their mutual correction and subordination, and the unity of plan which pervades the whole.”



REIN DEER.

REIN DEER.

MANY as are the animals which in their domesticated state are useful to man, and so greatly so as to make it difficult to say which deserves the most notice on this account; yet there is not perhaps one which, in the countries where its services are required, is of more entire and essential value than the rein deer: one may almost say that it is all in all to the Laplander.

“Their rein deer form their riches: these their tents,
 Their robes, their beds, and all their homely wealth
 Supply; their wholesome fare, and cheerful cups.
 Obsequious at their call, the docile tribe
 Yield to the sledge their necks, and whirl them swift
 O’er hill and dale, heaped into one expanse
 Of marbled snow, as far as eye can sweep,
 With a blue crest of ice unbounded glazed.”

How wonderfully is the Almighty power of God manifested in these and such countless numbers of other “ministers of His that do His pleasure.”

Captain Franklin, the celebrated voyager to the Arctic seas, about whose fate so much interest is at present excited, after the number of years, during which no tidings have been received from him, thus describes the mode in which the Dog-rib Indians kill the rein deer. He received the account from Mr. Wentzell, who had resided long among that people:—“The hunters go in pairs, the foremost man carrying in one hand the horns and part of the skin of the head of a deer, and in the other a small bundle of twigs, against which he from time to time rubs the horns, imitating the gestures

peculiar to the animal. His comrade follows, treading exactly in his footsteps, and holding the guns of both in a horizontal position, so that the muzzles project under the arms of him who carries the head. Both hunters have a fillet of white skin round their foreheads, and the foremost has a strip of the same round his wrists. They approach the herd by degrees, raising their legs very slowly, but setting them down suddenly, after the manner of a deer, and always taking care to lift their right or left feet simultaneously. If any of the herd leave off feeding to gaze upon this extraordinary phenomenon, it instantly stops, and the head begins to play its part by licking its shoulders, and performing other necessary movements. In this way the hunters attain the very centre of the herd without exciting suspicion, and have leisure to single out the fattest. The hindmost man then pushes forward his comrade's gun, the head is dropped, and they both fire nearly at the same instant. The deer scamper off, and the hunters trot after them: in a short time the poor animals halt, to ascertain the cause of their terror; their foes stop at the same moment, and having loaded as they ran, greet the gazers with a second fatal discharge. The consternation of the deer increases; they run to and fro in the utmost confusion; and sometimes a great part of the herd is destroyed within the space of a few hundred yards."

The rein deer can travel a hundred miles a day without being put into a gallop. They trot at the rate of about ten miles an hour.



COOT.

COOT.

THIS is a well-known English bird, common in many places where there is water. Its length is about one foot and a half; the bill and forehead, which is bare of feathers, are pale flesh-colour. The whole of the plumage is black, except the breast, which is of a dusky ash-colour, and a line of white along the ridge of the wing. The legs and feet are dark green.

The eggs are six or seven in number, of a dull white, sprinkled over with a number of small deep rust-coloured spots. "Many of these birds," says Montagu, "never forsake their breeding-places, even in small pieces of water; and, notwithstanding they are frequently roused, cannot be compelled to fly farther than from one side to the other. The vast flocks which are seen in Southampton River, and other salt-water inlets, in winter, must probably breed farther north, at least a great part of them. At this season of the year it is commonly sold in our markets. Most authors give as a specific character a yellow band or garter above the knee. This, however, does not always hold good, and may depend upon the season.

It is said to breed in great abundance in the Isle of Sheppy, where the inhabitants will not suffer the eggs to be taken, as the birds are a great article of food. They place their nests among the flags, on the surface of the water; and by heaping a quantity of materials together, raise the fabric above the water, so as to keep the eggs dry. In this buoyant state, a sudden gale

of wind has been known to draw them from their slender moorings; and we are assured that the nests have been seen floating on the water with the birds upon them." Bewick also relates in a note to his account of this bird, a similar instance. He says, "A bald coot built her nest in Sir William Middleton's lake, at Belsay, in Northumberland, among the rushes, which were afterwards loosened by the wind, and of course the nest was driven about, and floated upon the surface of the water in every direction; notwithstanding which, the female continued to sit as usual, and brought out her young upon her moveable habitation."

The same writer also adds, "As soon as the young quit the shell, they plunge into the water, dive, and swim about with great ease; but they still gather together about the mother, and take shelter under her wings, and do not entirely leave her for some time. They are at first covered with sooty-coloured down, and are of a shapeless appearance: while they are in this state, and before they have learned by experience to shun their foes, the kite, moor buzzard, and others of the hawk tribe, make dreadful havoc among them; and this, notwithstanding the numerous brood, may account for the scarcity of the species. The pike is also the indiscriminate devourer of the young of all these water birds." This is highly probable, for this fish may be considered as a kind of fresh-water shark, that grasps at every thing that comes within its reach.



WATER RAT.

WATER RAT.

THE water rat, or water vole, as it is otherwise called, is dispersed over the greater part of the continent of Europe. It is often considered as a variety of the common rat, but this is an erroneous supposition, for it is in fact a totally distinct species. In size it equals the common brown rat, being about eight inches long, and the tail nearly five inches in length, but the head is thicker than in the other named kind. The ears are scarcely visible, being buried in the fur.

This animal lives on various aquatic plants. "The water rat," says Mr. Howitt, "is considered a common thief, and is killed wherever he is found. If you watch him in his secluded streams, you will quickly discern that his food is almost entirely the herbage which grows in them; and especially the leaf of the arrow-head." It has indeed been supposed and asserted that it feeds also upon insects, small fish, frogs, and other animal diet, but there does not appear to be any foundation for this supposition. Mr. Bell, the author of the "History of British Quadrupeds," says, "There can be no doubt that this opinion has arisen from its being confounded with the common brown rat, which is well known to frequent the banks of ditches, and to feed readily on almost all animal substances, attacking even the smaller alive, when driven with hunger; and it is, in fact, in the organization essentially connected with their different habits and propensities that the characters of the two families consist."

The Rev. Gilbert White, the well-known author of

the "Natural History of Selborne," relates the following curious instance of the quantity of food collected together by these animals against the day of want in the winter time; he says, "As a neighbour was lately ploughing in a dry chalky field, far removed from any water, he turned out a water rat that was curiously laid up in an hybernaculum, artificially formed of grass and leaves. At one end of the burrow lay above a gallon of potatoes regularly stowed, on which it was to have supported itself for the winter."

The water rat frequents the borders of large ponds, reservoirs, streams, and rivers, dwelling in burrows of considerable extent; to which there are generally two or more outlets. The main outlet is generally close to the water's edge, so that during floods it is not unfrequently below the surface; but the gallery sloping upwards as it proceeds in the bank, terminates in a chamber which the water does not reach.

How admirably is every animal endowed with an instinctive sagacity, entirely sufficient for the supply of all its wants.



BUSTARD.

BUSTARD.

THIS noble and valuable bird was formerly met with in no inconsiderable numbers in this country, and even until recently a few used occasionally to be met with in the county of Norfolk, and in Lincolnshire, on Salisbury Plain in Wiltshire, and the wolds of Yorkshire. Now it is totally extinct, although a single specimen may from time to time be met with; for though so large and bulky a bird, the bustard has very considerable powers of flight, and can easily fly over to us from the Continent.

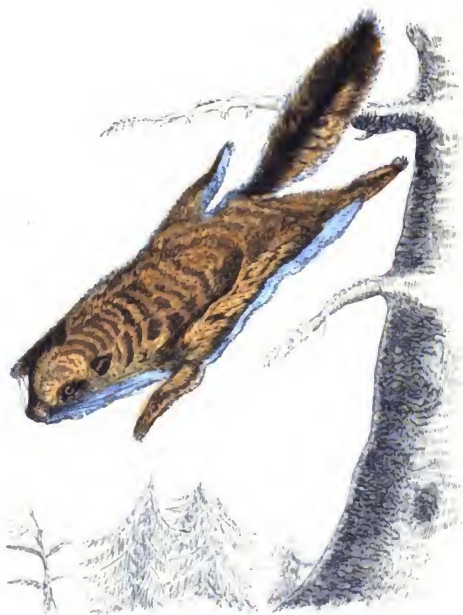
The colour of the bustard is on the upper parts a fine orange buff, barred with numerous transverse markings of black; the breast is white, with a tinge of yellow on the middle part. The tail is white at the base, which passes into yellowish brown, with one or two black bars. There is a long tuft of bristly feathers on each side of the lower bill, and the fore part of the neck is destitute of feathers, the skin being of a bluish black colour. "The male bustard weighs from twenty-five to thirty pounds, and measures about three feet three inches in length. The female seldom exceeds one-third of the size of the male.

Grain, various grasses, the tender leaves and sprout of turnips, insects, worms, frogs, etc., constitute their food. In the adult male there exists a membranous pouch beneath the skin on the fore part of the neck, having an entrance to it under the tongue. It is of considerable size, being capable, according to Pennant, of containing seven pints of water: it has indeed been



supposed by some that the use of this sack is for carrying a supply of water, either for its own use or that of the female and her young; but as the male takes no care of the brood, and as no water has ever been found in this pouch, this supposition is untenable. Its use, in fact, is unknown."

Another writer further observes, "The bustard runs very swiftly, and we have accounts of its having been chased by dogs, which we can readily credit, because a good greyhound would press so hard as not to allow the bird time of preparation for taking wing, should he come upon it by surprise." Mr. Selby, on the other hand, observes on this point, "Upon being disturbed, so far from running in preference to flight, as has often been described, it rises upon wing with great facility, and flies with much strength and swiftness, usually to another haunt, which will usually be at the distance of six or seven miles. It has also been said that in former days, when the species was of common occurrence, it was a practice to run down the young birds, before they were able to fly, with greyhounds, as affording excellent diversion. So far from this possibility existing with respect to the present remnant of the bird, the young birds upon being alarmed constantly squat close to the ground, in the same manner as the young of the lapwing, golden plover, etc., and in this position are frequently taken by the hand."



FLYING SQUIRREL.

FLYING SQUIRREL.

THIS singular and pretty little animal is a native of the midland regions of North America. The length of the body, including the head, is from four inches and a half to five inches; and the tail is about three inches and three-quarters long; the ears are rather pointed, and the eyes are surrounded by a broad circle of black. Underneath, the lesser flying squirrel is nearly white; and above, it is of a bright mouse-colour, with a shade of yellowish buff. The membranes between its legs, by which it performs what is called its flight, are of a fawn-colour, with a black band; and the tail is of the same colour as the rest of the body, but dusky beneath.

Mr. Bennett gives the following description of the membrane above alluded to, as "a folding of the skin along either side, so as to form broad lateral expansions, supported before and behind by the limbs, between which they are extended, and by peculiar bony processes arising from the feet. These expansions are not naked and membranous, like those of the bats, but are actual continuations of the skin, clothed externally by a dense fur, similar to that which invests every other part of the body. Neither do they serve the purpose of wings, their functions being limited to that of a parachute, giving to the animal a considerable degree of buoyancy, and thus enabling it to take leaps of almost incredible extent, through which it passes with the velocity of an arrow. The name of "flying squirrel" is consequently founded on an erroneous assumption, but it may, nevertheless, be admitted as a metaphorical expression of

their most distinguishing peculiarity."

Catesby writes of them, "They will dart four score yards from one tree to another. They cannot rise in their course, nor keep in a horizontal line, but descend gradually, so that in proportion to the distance of the tree they mean to dart to, so much the higher they mount on the tree they are about to leave, that they may reach some part, even the lowest of the distant tree, rather than fall to the ground, which exposes them to peril; but having once recovered the trunk of a tree, no animal seems nimble enough to take them."

With regard to their habits, these animals, during the day, hide and sleep in the hollows of trees, and unless disturbed from these retreats, are seldom seen; but in the night-time they come forth to feed in small companies of ten or a dozen, every one of them lively and active in all their movements.

Their food consists, like that of other squirrels, of nuts, acorns, and tender shoots of trees and plants. They are easily tamed; but it is a pity to deprive these or any other active wild animals of their liberty, without the full exercise of which they cannot possibly be happy.



STILT PLOVER.

STILT PLOVER.

THIS, which is a very rare species in this country, is certainly one of the longest-legged birds, in proportion to its size, that is known. It is plentiful in some parts of the world, namely, according to Latham, in the East and West Indies, in Egypt, on the shores of the Caspian sea, and in the warmer parts of America.

One of these birds was killed in the Isle of Anglesea, in the year 1793; and six were shot out of a flock of seven, in the month of April, on the edge of a lake near Farnham, in Surrey. Sir Robert Sibbald mentions two which were shot in Scotland; and Pennant, one obtained near Oxford. Others have since been met with.

In the eastern portions of Europe, where the stilt plover is said to arrive from Asia in small flocks, it takes up its abode along the lakes, and among the vast morasses of Hungary and Russia, where it rears its progeny, and where it fearlessly wades in search of its food, without much chance of being carried out of its depth; but should such an occurrence happen, or the waves drift it out from the shore, it possesses the power of swimming with the greatest ease and lightness. Few birds exceed it in the powers of flight; it passes through the air with astonishing rapidity. When on firm ground, it appears as if tottering on long and awkward stilts.

The following is the scientific description:—Length, from the end of the bill to the end of the tail, one foot one inch; from the end of the bill to the end of the toes, one foot six inches; the eye is red; the bill, which

is two inches and a half in length, is long, slender, and black. The forehead is white, as is the space round the eyes; the crown of the head, the back, and the wings, glossy black; the tail, black, but inclining to grey; the neck and the breast, white, the neck behind is marked with dusky streaks, but in some specimens it is without them, which is probably the case in maturity. The legs are bare of feathers for three inches and a half above the knee; they are of a red-colour, and four inches and a half long below the knee; the outer and the middle toes are connected together at their base by a membrane.

The female is inferior in size, and the dark parts of her plumage incline more to brown, without exhibiting the glossy green lustre of the male bird. Young birds have the feathers of the back and wings brown."

Latham says of this species, which is otherwise called the long-legged plover, long-shanks, or long-legs, that its food is believed to consist principally of flies; but of its general habits and peculiarities very little is known.



KOALA.

KOALA.

THIS is a very extraordinary animal, and only one species of the genus has been as yet discovered.

The koala is a native of New South Wales; and the Colonists there call it the native bear, or monkey. By some of the natives it is called 'goribun.' It is described as being "thick and stoutly made, with robust limbs, and powerful claws: there is no tail. The head is large, the muzzle blunt. The ears are large, standing out from the sides of the head, and tufted with long full fur: the eyes are small. The fore feet have each five toes, armed with large sharp claws; these toes are divided into five sets, the first two forming a pair by themselves, and antagonizing with the other three; the hind feet have also five toes, namely, a large and powerful thumb, destitute of a nail, and well padded beneath, and four strongly-clawed toes, of which the two first are united together as far as the last joint."

This animal does not appear to be very abundant; at least it is seldom seen in collections of objects of Natural History from its native country. "In its habits it is nocturnal and arboreal; it climbs with great facility, and in passing along the branches, suspends itself, like a sloth, by its claws, which in adults are very powerful. The female carries her young one clinging to her back, and long continues her care of it. The koala, however, does not live exclusively on the trees: it visits the ground, and there burrows, and that with facility.

In the cold season it is said to make a nest in its underground retreat, and retiring to it, there to lay

dormant. Its food is entirely vegetable, and consists, in part at least, of the young leaves of the gum-trees; it laps like a dog when drinking, and uses its forepaws in laying hold of the branches while it feeds. Its voice is a soft barking sound: on the ground its gait resembles that of a bear. The length of the head and of the body together, is about two feet two inches. The fur is compact, woolly, and of an ashy grey, patched with white over the crupper: the inside of the upper part of the legs is rusty grey."

"The New Hollanders," Colonel Patterson states, "eat the flesh of this animal, and therefore readily join in the pursuit of it. They examine, with wonderful rapidity and minuteness, the branches of the loftiest gum-trees, and, upon discovering a koala, they climb the tree in which it is seen with as much ease and expedition as an European would mount a tolerably high ladder. Having reached the branches, which are sometimes forty or fifty feet from the ground, they follow the animal to the extremity of a bough, and either kill it with the tomahawk, or take it alive."



WAGTAIL.

WAGTAIL.

THIS is a well-known and interesting little bird. There are several species found in this country. Its name, as may be supposed, is derived from a constant habit it has of moving its tail up and down. Its weight is about six drachms. It is about seven inches and a half in length from the tip of the bill to the end of the tail, and about eleven inches in breadth between the points of each extended wing. The bill is rather long, sharp, and slender, and of a dusky colour. The eyes are brown, with a rim of white encircling each, and there are some white marks on each side of the throat. The tips of some of the quill feathers of the wings are white, forming a small white line upon the wing; and there are white edges to some of the tail feathers, which form similar lines on them. The tail is about three inches in length; the outer feathers are chiefly white, the others are black.

In general form and appearance the wagtail is by no means unlike the magpie. Next to sparrows and robins it seems to live on terms of the greatest familiarity with man, and exhibits very little fear or shyness.

"This," says Bewick, "is a very common bird with us, and may be seen everywhere, running on the ground, and leaping after flies and other insects, on which it feeds. Its usual haunts are the shallow margins of springs and running waters, into which it will sometimes wade a little in pursuit of its food. They make their nest on the ground, of dry grass, moss, and small roots, lined with hair and feathers; and have been known sometimes to

breed in the deserted nest of the swallow, in chimneys. The female lays five white eggs, spotted with brown. They are very attentive to their young, and continue to feed and train them for three or four weeks after they are able to fly. They defend them with great courage when in danger, or endeavour to draw aside the enemy by various little arts. They are very attentive to the cleanliness of their nests, and have been known to remove light substances, such as paper or straw, which have been laid as a mark to find them by.

The wagtail is said by some authors to migrate into other climates about the end of October; with us it is known to change its quarters, as the winter approaches, from north to south. Its note is small and insignificant, but frequently repeated, especially while on the wing."

A pair of pied wagtails once built their nest in an old rat-trap, and remained unmolested either by the rat-catcher or the rat. On the other hand, the nest of the wagtail is one of those which are commonly selected by that strange bird, the cuckoo, for depositing her solitary egg in to be hatched, and its young bird to be brought up by the tenant of the nest, to the exclusion and even the destruction of her own lawful offspring. This is one of the most mysterious things in the wide page of the large book of Nature's History.

WOMBAT.



WOMBAT.

THE wombat is a very curious animal, one of those which are found only in New Holland, most of the animal productions of which country are peculiar to itself, and unknown in any other part of the globe.

It is about the same size as the badger, and, like it, lives in holes, and resembles, in many particulars, the burrowing class. It feeds almost entirely on herbs and fruits, on which it becomes very fat, and its flesh is considered extremely good. Its head is large and flat, its neck thick and short, and its legs also short. It has not any tail, so that, as will be apparent from this short description, its general appearance is heavy and clumsy. Its fur is smooth and thick, and of a yellowish brown or grey colour. In its habits it is sluggish, and has a hobbling or shuffling gait, somewhat like that of a bear.

Mr. Bass, when at Cape Barren Island, chased one of these animals, and having overtaken it, "by placing his hands under its body, he suddenly lifted it from the ground, and laid it on its back upon his arm, as a child would be. It made no noise, nor any effort to escape, not even a struggle; it seemed quite contented, as if it had been nursed by Mr. Bass from its infancy. He carried the animal upwards of a mile, and often shifted him from arm to arm, sometimes laying him upon his shoulder, all of which he took in good part, until being obliged to secure his legs while he went into the bush to cut a specimen of a new wood, the creature's anger arose with the pinching of the twine; he whizzed with all his might, kicked and scratched most furiously, and

snapped off a piece from the elbow of Mr. Bass's jacket. Their friendship was here at an end, and the creature remained intractable all the way to the boat, ceasing to kick only when he was exhausted."

A specimen of the wombat brought to England and kept in confinement, evinced a gentle disposition. "It burrowed in the ground whenever it had an opportunity, and covered itself in the earth with surprising quickness; it was very quiet during the day, but constantly in motion in the night; was very sensible to cold; ate all kinds of vegetables, but was particularly fond of new hay, which it ate stalk by stalk, taking it into its mouth like a beaver, by small bits at a time. It was not wanting in intelligence, and appeared attached to those to whom it was accustomed, and who were kind to it. When it saw them, it would put up its fore paws on their knees, and when taken up, would sleep in the lap. It allowed children to pull and carry it about, and when it bit them, it did not appear to do so in anger, or with violence."



EMEU.

THIS is a large bird of the tribe of the ostriches, a native of New Holland, and called also the New Holland cassowary. Specimens may be seen alive in the Gardens of the Royal Zoological Society in the Regent's Park, London. They have been found in numbers in the neighbourhood of Port Philip, and King George's Sound, and also on Kangaroo Island.

The emeu is a very large bird, nearly of the size of the ostrich. It strongly resembles it in very many respects; its legs, however, are not quite so long; its neck is shorter, and more thickset on the body. It is about six or seven feet high when standing upright. "The wings are simple rudiments, destitute of plumes, and hidden beneath the feathers of the body: these have loose barbs; each feather consists of two plumes; the accessory plume, which is usually very short, being greatly elongated. As the feathers lie loosely hanging on the bird, they resemble hair; the cheeks and the throat are nearly destitute of plumage. The general colour is dull greyish brown, and the bare sides of the head, and the throat, of a purple colour.

The sound which the emeu utters is very singular; it is a hollow inward drumming, effected by a peculiar structure of the windpipe.

The female lays from seven to eleven eggs, which are of a beautiful deep green, the shells very hard, and nearly as large as those of the ostrich. The young, when hatched, are clothed with thick downy plumage, of a greyish white colour, with two stripes of black down

the back, two down the side, and two interrupted stripes down the fore part of the neck and breast.

Timid and peaceful, the emeu trusts alone to its speed for safety, excepting indeed when hard pressed; it then strikes violently with its legs: it is chased with dogs. We learn from Mr. Cunningham, that few dogs, except such as are specially trained, can be brought to attack it, both on account of some peculiar odour in the flesh which they dislike, and, because when driven to extremity, it defends itself with great vigour, striking out with its feet, and inflicting terrible wounds. The settlers, he observes, assert that "it will break the small bone of a man's leg by this sort of kick."

Though these birds are shy and wary, they take but little pains in the concealment of their nest, which is very simple, consisting of a few sticks, leaves, and grasses, scraped together upon a clear space amidst brushwood. The natives seek for the eggs, which during the season form a great portion of their subsistence. The food of this bird consists of leaves, fruits, and herbage, for the plucking of which its straight strong beak, which is rounded at the point, is well adapted."

Though the emeu is not an aquatic bird, yet it has been observed by Captain Sturt to swim well, as he saw it thus cross the Murrumbidgee River.

There seems no doubt but that if desired, the emeu might easily become naturalized in this country, so as to form an ornament in parks and pleasure grounds.



AXIS DEER

AXIS DEER.

THIS is a very elegant animal of the deer kind, and a native of India. It is perhaps one of the best-known of all the Indian species of the family among us; for it not only is able to be kept in our menageries or zoological gardens, but thrives well in open parks.

It is very plentiful in various parts of India, being found on the banks of the River Ganges, and in the province of Bengal, as also in many of the larger islands which compose the Indian Archipelago. There "it lives in herds, the luxuriant vegetation of the jungles, its favourite localities, affording abundance of food.

The general colour of this species is fawn yellow, a black stripe running down the spine of the back. The sides are beautifully and regularly spotted with white: a row, forming an almost continuous line, passes along each side."

In all the different species of deer that comprise what is called the Axine group, the limbs are of a delicate form and slender make, and the general shape is rather graceful than robust. Few of them exceed our common fallow deer in size, and, excepting as regards the antlers, the axis deer bears a very strong resemblance to it, especially the female, so much so indeed as to be scarcely distinguishable on a superficial inspection. "The hair is short, smooth, and close; the expression of the physiognomy is gentle, yet animated, and agrees with the disposition."

In captivity, these deer are quiet and inoffensive, but timid and suspicious. Their sense of smell is so acute

that, although fond of bread, which they readily take from the hands of visitors, they will not touch it if it have been previously blown upon; and it is stated that they will not even accept it, if it have been much handled.

The horns of the male axis deer rise vertically from the head, but differ from those of the fallow deer in being perfectly cylindrical and rounded throughout, and not at all palmated, as those of the latter are at the tip. The spots also on the fur of the animal do not change in the winter, and the head is a little longer in shape.



WHIDAH FINCH.

WHIDAH FINCH.

THIS is the proper name of this bird, which is frequently corrupted into the name of widow finch, or widow bird. The name of whidah bird is believed to have been given to it by the Portuguese, as derived from the kingdom of Whidah, which is situated towards the central part of the western coast of Africa; it is also found in various parts of that continent, from Senegal to Angola. "It is related nearly to the linnets, with the exception of the peculiar structure of its tail, having two or more of the intermediate quill feathers in the male birds lengthened in an extraordinary degree. The tail itself consists of twelve feathers, of which the elongated ones are vertical; two being flowing and pendent, and two, the middle ones, broad, with the shaft projecting like a slender filament beyond the end. Size, that of a sparrow. It has much the manners of the linnet, and is lively and active in captivity, which it endures without much appearance of constraint, jumping from perch to perch, and alternately raising and depressing its long tail with great vivacity. It is fed upon grain, with the occasional addition of green herbs; and is fond of bathing in the water which may happen to be placed in its cage.

Twice a year it is subject to a change of plumage, the long feathers, the peculiar attribute of the male, falling off in autumn, and returning in spring, when he recovers with his new dress, his sharp, but agreeable and varied note. His summer dress is, on the upper part, black, except the back of the neck, which is half-surrounded with a broad lightish chestnut band; the breast is reddish

brown, the under part nearly white. In winter, its head is variegated with black and white; its breast and back of a dull orange, with dusky spots; its quill feathers dark brown, and its under parts dusky white; the bill is dusky; the iris of a deep brown, approaching to black; the legs of a yellowish buff colour. It is said to live twelve or fifteen years."

The whidah bird is allied to the finches, of which we have several examples in this country, such as the goldfinch, the linnet, the greenfinch, and the chaffinch.

Another species, the red-billed whidah bird, is found in the same regions as the preceding one, but is of less size. "Of the four middle and greatly-elongated tail feathers, two are convex, and two, one within the other, concave, so that when all four are closed together, they form a sort of cylinder, and, but for their extremities, appear at first sight as one. The general colour of the male in full plumage is glossy blue black, with a white collar, and white wing coverts and scapularies, of which hue are also the lower part of the back, the throat, the chest, and the under parts. In habits it agrees with the other species."



MORDED KALAJOU.

HORNED SAPAJOU.

THERE are many different species of this genus, as the yellow-breasted sajou, or sapajou, the brown sajou, and the horned sajou, the one before us.

The native country of this animal is the Brazil, a part of the world very rich in the productions of nature. Little or nothing is known of its habits in a state of nature; but it is easily tamed, and is described as being, when in domestication, lively and amusing, active and good-tempered. It is found too in the provinces of Rio de Janeiro, and also in South America.

The general colour of the fur of the horned sajou is brown, the top of the head being much darker, and approaching almost to black, which also prevails in like manner on the middle of the back, and on the legs, hands, feet, and tail. "A bandeau of hair rises on the forehead, the extremities of which are elevated in the form of egrets, or pencil-like tufts: these tufts are less conspicuous in the female. The sides of the face are garnished with white hairs. It is not until maturity that the horns or frontal tufts are acquired."

The following is the generic account of the animals to which this species belongs:—The monkeys of this genus are all diurnal in their habits, and for the most part of small size. The French call them sapajous, sajous, saûs, and capucins. They are also called weepers, from the plaintive piping noise which many of them utter. Humboldt states that the Creoles of South America call them 'matchi,' confounding under this denomination very distinct species. In temper and disposition the

cebi are lively and docile; they shew great attachment to some persons, and a capricious aversion to others; they are intelligent, mischievous, and inquisitive. Their activity and address are surprising. In their native forests they live in troops, feeding on fruits, grain, insects, and eggs. So amusing are they in their gambols, that even the apathetic natives will stop their canoes, and watch their frolics with interest. They are, from their liveliness and docility, great favourites, and are often kept domesticated; but their amusing habits do not protect them from the poisoned arrows of the Indians. The head is round, the muzzle short, and the limbs well proportioned; the ears are rounded.

One of the species of sapajou was met with by Humboldt in considerable troops in the forests near the cataracts of the Oronoko, and the mission of Santa Barbara. They are extremely mild in disposition, and very active; are often kept by the Indians; and one was seen by Humboldt, at Maypures, which every morning caught a pig, and continued seated on his back during the day, while feeding in the savanna round the Indian huts. Another is mentioned, in the house of a missionary, which would often ride upon a cat, which had been reared in its company, and which patiently suffered the exploits of the sapajou.



SKUA.

THIS species of sea gull is only occasionally met with on the English shores, being far more common in the northern parts of Scotland, and the adjacent islands.

Its length is about two feet, and the expanse of the wings between four and five. It weighs about three pounds. The bill is dark, and more than two inches long: it is strong, much hooked, and sharp at the tip. The plumage on the back is a rather dark brown, the feathers edged with a dull yellowish rust-colour. The breast is of the same general hue, but much lighter. The legs and toes are covered with black scales; the claws strong and hooked, the inner one more so than the rest.

Bewick gives the following account of this bird. He says, "This species is met with in the high latitudes of both hemispheres, where they are much more common than in the warm or temperate parts of the globe. In Captain Cook's voyages they are often mentioned; and, from being numerous about the Falkland Isles, the seamen called them Port Egmont hens. They are also common in Norway, Iceland, and the Ferro and Zetland Isles. They prey not only upon fish, but also upon the lesser sorts of water-fowl, and, it is said, even upon young lambs: this, however, is doubted, and even denied: on the contrary, these birds are said to afford protection to the flocks, by driving away the eagle, raven, etc., which they furiously attack whenever they come within their reach, and on this account are highly valued. They are uncommonly courageous in defence of their

own young, and seize, with the utmost vengeance, upon any animal, whether man or beast, that offers to disturb their nests; they sometimes attack the shepherds even, while watching their flocks, who are obliged, in their own defence, to guard their heads, and to ward off the blows of the assailants, by holding a pointed stick towards them, against which they sometimes dash with such force as to be killed on the spot. They make their nests among the dry grass, and, when the young are reared, they disperse themselves, commonly in pairs, over the ocean.

The feathers of this species, as well as those of other gulls, are by many people preferred to those of the goose; and in some parts they are killed in great numbers, merely for the sake of the feathers."

OTTER.



OTTER.

THIS animal, as is well known, is extremely destructive of fish, on which it principally lives. It has, however, been known to prowl into farm-yards, and destroy poultry and young lambs and pigs; walking, according to Izaak Walton, six or ten miles in a night. In Canada, during the winter, they often travel a long distance; and the Indians track them in the snow, and kill them with clubs, for they cannot run very fast on the land, though in the water they are wonderfully agile and swift.

Otters may easily be tamed, and taught to catch fish for their masters. Thus, in an Edinburgh magazine it is stated, "Otters can be easily tamed and instructed to fish. A person who kept a tame otter accustomed it to associate with his dogs, who soon became upon the most friendly terms. It would accompany him in different excursions, along with his canine attendants. He was in the habit of fishing in rivers with nets, when the otter proved highly useful, by going into the water, and driving trout and other fish towards the net. Even dogs accustomed to otter hunting refused to hunt any other otter while it remained in their company; on which account the owner was under the necessity of parting with it, although so useful in its avocations." Again, William Collins, who resided at Kilmerston, near Wooler, in Northumberland, had a tame otter which used to follow him. He frequently took it to fish in the river for its own food; and it never failed to return to him. One day, in the absence of Collins, the otter, being taken out to fish by his son, refused to come at the accus-

tomed call, and was lost. Collins tried every means to recover it, and after several days search, being near the place where it was lost by his son, and calling it by name, it came creeping to his feet, exhibiting many unabated marks of affection and attachment."

Bewick also mentions a young one, which had been taught to catch fish with so much success, that it would sometimes capture ten salmon in a single day.

The following lines of the poet Somerville, in his "Chase," well depict the habits of the otter:—

"Where rages not oppression? where, alas!
Is innocence secure. Rapine and spoil
Haunt even the lowest deeps. Seas have their sharks;
Rivers and ponds enclose the ravenous pike;
He in his turn becomes a prey; on him
Th' amphibious otter feasts. Just is his fate
Deserved; but tyrants know no bounds: nor spears
That bristle on his back, defend the perch
From his wide greedy jaws; nor burnished mail
The yellow carp; nor all his arts can save
The insinuating eel, that hides his head
Beneath the slimy mud; nor yet escapes
The crimson-spotted trout—the river's pride,
And beauty of the stream. Without remorse,
This midnight pillager, raging around,
Insatiate swallows all. The owner mourns
Th' unpeopled rivulet, and gladly hears
The huntsman's early call."



LYRE BIRD.

THIS is a very singular-looking bird, at least its tail, which it carries erect over its back, is very curious; in other respects it is quite plain, being in general appearance not very unlike a moorhen. In New South Wales, where it is common, it is the custom to hang up the tail of the lyre bird in the houses for ornament, and as a curiosity, in the same way that we do that of the peacock in this country.

The following account of our present subject is partly taken from that given by Mr. Gould, the celebrated author of the "Birds of Australia," and other splendid works in ornithology. He says, "Of all the birds I have ever met with, the *menura* is far the most shy, and difficult to procure. While among the mountains, I have been surrounded by these birds, pouring forth their loud and liquid calls, for days together, without being able to get a sight of them; and it was only by the most determined perseverance and extreme caution that I was enabled to effect this desirable object, which was rendered more difficult by their often frequenting the almost inaccessible and precipitous sides of gullies and ravines, covered with tangled masses of creepers and umbrageous trees. The cracking of a stick, the rolling down of a small stone, or any other noise, however slight, is sufficient to alarm it; and none but those who have traversed those rugged, hot, and suffocating brushes, can fully understand the excessive labour attendant on the pursuit of the *menura*."

The lyre bird is of a wandering disposition, and, although

it probably keeps to the same brush, it is constantly engaged in traversing it from one end to the other, from the mountain base to the top of the gullies, whose steep and rugged sides present no obstacle to its long legs. It is also capable of performing extraordinary leaps, and I have heard it stated that it will spring ten feet perpendicularly from the ground. The early morning and the evening are the periods when it is most animated and active.

It may truly be said that the beauty of this bird lies in the plumage of his tail, the new feathers of which appear in February and March, but do not attain their full beauty until June; during these and the four succeeding months, it is in its finest state; after this, the feathers are gradually shed, to be resumed again at the period above stated."

"The *menura* equals a common pheasant in size, but its limbs are longer in proportion, and its feet much larger; the toes are armed with large arched blunt claws; the head is small; the beak triangular at the base, pointed and compressed at the tip. The tail is modified into a beautiful long plume-like ornament, representing, when erect and expanded, the figure of a lyre, whence the name of lyre bird. The appearance of these feathers, the length of which is about two feet, is peculiarly graceful; their colour is umber brown, but the two outer tail feathers are grey, tipped with black, edged with rufous, and transversely marked on the inner web with transparent triangular bars. The general plumage of the *menura* is umber brown above, tinged with olive, and merging into rufous on the wings, and also on the throat. The under parts are ashy grey."



LAGOTIS.

LAGOTIS.

OF the genus lagotis there are two species described and figured by Mr. Bennett, and he gives the following translation of an account of the one called Cuvier's lagotis, written by Antonio de Ulloa, in the year 1772, in his "Noticias Americanas:"—"Taking the place of the rabbit, which is wanting in Peru, there is another kind of animal, called viscacha, which is not found in Quito. In form, and in the colour of the fur, it is similar to the rabbit, but differs from it in having a long tail furnished with tufted hair, which is very thin towards the root, but thick and long as it approaches the tip. It does not carry its tail turned over the head like the squirrel, but stretched out, as it were, in a horizontal direction: its joints are slender and scaly.

These animals conceal themselves in holes of the rocks in which they make their retreats, not forming burrows in the earth like rabbits. There they congregate in considerable numbers, and are mostly seen in a sitting posture, but not eating; they feed on the herbs and shrubs that grow among the rocks, and are very active. Their means of escape do not consist in the velocity of their flight, but in the promptitude with which they run to the shelter of their holes. They have this peculiarity, that as soon as they die, their hair falls off; and on this account, although it is softer and somewhat longer and finer than that of the rabbit, the skin cannot be made use of for common purposes. The flesh is white, but not well-flavoured, being especially distasteful at certain seasons, when it is altogether repugnant to the palate."

This species of lagotis dwells among the slopes of the Peruvian Andes, on their western side. Its general colour is a greyish ash, which is varied here and there with a tinge of brown. The hairs of the tail are mingled black and white. In length, this species is about one foot four inches, including the head, and the ears, which are rounded, and turned inwards at the edges, equal the head in length. The tail is about one foot long; the toes, both on the fore and the hind feet are four in number; the hind legs are considerably developed; the nose is rather long and narrow, and is furnished with long whiskers. The eyes are of moderate size, but prominent.

On the whole, therefore, as before observed, this animal bears a general resemblance to the rabbit.



DOTTEREL.

DOTTEREL.

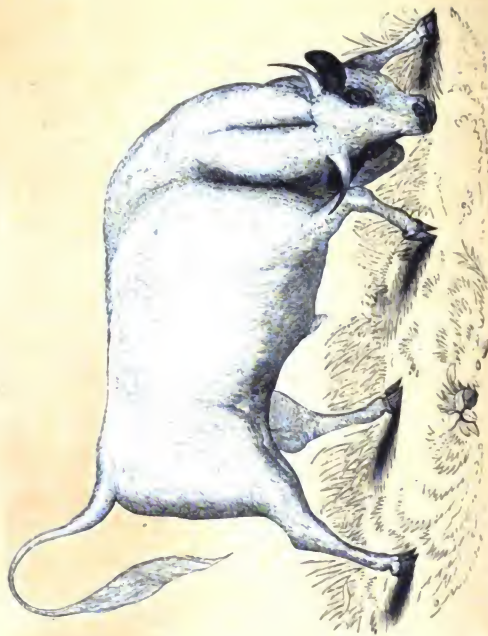
THIS is a very pretty bird, its colour being principally various shades of brown and rust-colour. The length is about nine inches. The bill is black; the eyes, dark, large, and full; the forehead mottled with brown and white; top of the head black; over each eye an arched line of white passes to the hinder part of the neck; the cheeks and throat are white; the back and wings light brown, inclining to olive, each feather margined with pale rust-colour; the quills are brown; the fore part of the neck is surrounded by a broad band of a light olive-colour, bordered on the under side with white; the breast above is pale dull orange, black on the middle, and reddish white or yellowish lower down; the tail is olive brown, black near the end, and tipped with white, the outer feathers margined with white; the legs dark olive-colour. It used formerly to be far more common than it now is; for the cultivated districts are not so much to its taste, as those which are more retired and in the state of nature.

“Though the dotterel certainly breeds on the Grampians, on Skiddaw, and other mountains in the northern portion of our island, yet it must be considered rather in the light of a visitor to our shores than a permanent resident. Its great breeding-places are the high latitudes of Russia, Lapland, and Northern Asia. It breeds also on the bare plateaux of the Norwegian mountains, and in Bohemia and Silesia, at an elevation of four thousand eight hundred feet. The eggs are light olive brown, blotched and spotted with black.

In former times the dotterel used to be taken by means of a net; but this has long since been superseded by the gun. It was said to imitate the actions of the fowler, and various supposed qualities are attributed to it by several old writers. Thus Drayton, in his *Polyolbion*, says,

“The dotterel, which we think a very dainty dish,
Whose taking makes such sport as no man more can wish;
For as you creep, or cower, or lie, or stoop, or go,
So, marking you with care, the apish bird doth do,
And acting every thing, doth never mark the net,
Till he be in the snare which men for him have set.”

In the autumn, vast flocks of the dotterel, on their way from the north to the warmer regions of Southern Europe, visit our island; and a similar visit is paid in spring by the flocks on their return from the south to their northern breeding-places. With respect to its general habits, the dotterel closely agrees with the golden plover; it has been accused, indeed, of excessive stupidity; but for no other reason than because, fresh from the wilds untrodden by man, it has not experienced persecution. In the autumn its flesh is excellent. It undergoes a change of plumage analogous to that of the golden plover.”



WILD BULL.

CHILLINGHAM WILD BULL.

THIS animal is so called from being found in a wild, or all but wild state, in Chillingham Park, in the county of Northumberland, the seat of Lord Tankerville. There are also some of the same kind in Cadzow Forest, at Hamilton, Lanarkshire.

The Chillingham ox is generally supposed to be descended from the original stock of wild kine in the country, but there seems considerable reason to doubt this being the fact. It is more probable that it is the descendant of some ancient domestic breed.

The following is part of an account of these animals, published by Lord Tankerville:—

“In form they are beautifully shaped; have short legs; a straight back; horns of a very fine texture; a thin skin, so that some of the bulls appear of a cream-colour; and they have a cry more like that of a wild beast than that of ordinary cattle. They are fierce when pressed, but, generally speaking, very timorous, moving off at the appearance of any one, even at a great distance; yet this varies very much in different seasons of the year, according to the manner in which they are approached. In summer, I have been for several weeks at a time without getting a sight of them—they, on the slightest appearance of any one, retiring into a wood, which serves them as a sanctuary. On the other hand, in winter, when coming down for food into the inner park, and being in contact with the people, they will let you almost come among them, particularly if on horseback. But then they have a thousand peculiarities. They will be

feeding sometimes quietly, when if any one appear suddenly near them, particularly coming down the wind, they will be struck with a sudden panic, and gallop off, running one after another, and never stopping till they get into the wood.

It is observable of them, as of red-deer, that they have a peculiar faculty of taking advantage of the irregularities of the ground; so that, on being disturbed, they may traverse the whole park, and yet you hardly get a sight of them. Their usual mode of retreat is to get up slowly, set off in a walk, then a trot, and seldom begin to gallop till they have put the ground between you and them in the manner that I have described. When they come down into the lower part of the park, which they do at stated hours, they move like a regiment of cavalry in single files, the bulls leading the van, as in retreat it is the bulls that bring up the rear. Lord Ossulston witnessed the curious way in which they took possession, as it were, of a new pasture recently opened to them. It was in the evening sunset. They began by lining the front of a small wood, which seemed quite alive with them; when all of a sudden they made a dash forward altogether in a line, and charging close by him across the plain, they then spread out, and, after a little time, began feeding."



THRUSH.

THRUSH.

THERE are several birds of the genus to which the one before us belongs, some of them natives of our own country; as for instance the missel thrush, the redwing, the fieldfare, the blackbird, and the ring ouzel. The song thrush is, however, as common as any, and an especial favourite for the mellow richness of its song. It is also a very handsome bird, though its colours are not bright; its breast being very beautifully spotted all over.

“This splendid songster is common over the greater portion of Europe, being migratory in Norway, Sweden, and the northern districts, but stationary in our island, and in France, Italy, and other parts of the south. As the winter advances, flights of thrushes arrive in Great Britain, with a north or north-east wind; and after staying a few days to recruit, move southwards.

The thrush is a hardy bird, and begins to enliven the woods and glens with his rich-toned notes, even as early as the month of January, if the season be temperate; and pairs and commences the work of nidification in March. The nest is generally in a thick bush, amidst clustering ivy, or closely-tangled bowers of dog-roses, in woods, or in full evergreens, as the Portugal laurel or holly. Externally it is composed of bent twigs, moss, and grass, closely interwoven, being plastered within with a very thin smooth layer of rotten wood, cemented with gluten, and laid as a coating, or fine cement, upon a thicker layer of some coarser material, scarcely carried so high as the brim of the nest. This lining is waterproof and tough, and

well calculated for protecting the eggs or young from the keen winds of early spring. Two broods are produced yearly.

Worms, snails, slugs, insects, and berries constitute the food of the thrush. The common garden snail and the wood snail are greedily devoured, the bird beating the shell against a stone till it is completely broken, and the contents are disengaged."

The following anecdote is related in the "Zoologist:"—"This year, (1845,) during the breeding season, a pair of thrushes located themselves in a shed belonging to the Navigation Company, and forthwith proceeded to build their nest. It was placed on a shelf among some odd pieces of wood, and in it, when finished, were laid four eggs, which, after the usual period of incubation, were hatched. The shelf on which the nest was built was not above five feet from the bench, at which three or four carpenters were continually at work."

This is only one out of numberless instances which prove that if birds are but treated with kindness, and not alarmed or molested, they will become far more familiar, and consequently be far better known than might otherwise be ignorantly imagined.



DUCK-BILLED PLATYPUS.

DUCK-BILLED PLATYPUS.

THE duck-billed platypus is one of the most singular animals that has ever been discovered. It has not been known many years, and is one of the productions of New Holland.

The most curious feature, as it may properly be called, in this anomalous quadruped, is its duck-like bill, which harmonizes with its webbed feet; thus combining the parts both of a bird and an animal.

The body is long, low, and depressed. The fur is close-set, and consists of two kinds, that which is underneath being soft, short, and waterproof, and the outer covering being long, fine, glossy hair, thickly set. The tail is strong, broad, and flattened, and of moderate length. The general colour of the creature is deep brown, the head and the under parts being of a paler hue than the upper. The average length of the head and body, including the tail, is from twenty to twenty-three inches, the beak being about two inches and a half in length, and the tail four or five inches.

The duck-billed platypus has never yet been brought alive to Europe. Mr. Bennet says of a family of them which he procured, and kept for a considerable time, "The young sleep in various postures; sometimes in an extended position, and often rolled up, like a hedgehog, in the form of a ball. They formed an interesting group, lying in various attitudes in the box in which I had placed them, and seeming happy and content. Thus, for instance, one lies curled up like a dog, keeping its back warm with the flattened tail, which is brought over

it, while the other lies stretched on its back, the head resting, by way of a pillow, on the body of the old one, which lies on its side, with the back resting against the box; the delicate beak and smooth clean fur of the young contrasting with the rougher appearance of the old one; all fast asleep." Again, he continues, "One evening both the animals came out about dusk, and went as usual, and ate food from the saucer, and then commenced playing with one another like two puppies, attacking with their mandibles, and raising their fore-paws against each other. In the struggle, one would get thrust down, and at the moment when the spectator would expect it to rise again and renew the combat, it would commence scratching itself, its antagonist looking on, and waiting for the sport to be renewed. When I placed them in a pan of deep water, they were eager to get out after being there only a short time; but when the water was shallow, with a turf of grass in one corner, they enjoyed it exceedingly. They appeared to be in a great measure nocturnal, preferring the twilight to the bright glare of day.

The duck-billed platypus is essentially an aquatic animal, and passes a great part of its existence almost exclusively in the water.



DOUBLE-CRESTED HUMMING-BIRD.

DOUBLE-CRESTED HUMMING-BIRD.

THE double-crested humming-bird is one of the most beautiful of the resplendent family to which it belongs. "This is a most gorgeous species. Two flattened fan-shaped crests, each composed of six small feathers, part from the forehead on a level with the eyes. The brilliancy of these crests surpasses description, glistening, as they do, with the lines of polished gold and red copper, changing into the gemmy tints of the ruby and emerald; now fire-coloured, anon the purest green, and presently the brightest yellow. The scaly feathers of the forehead between the two crests sparkle with metallic uniform green, changing to steel or sapphire blue. A *camail* of dark changeable violet extends from the throat behind the eyes, and descends along the sides of the neck to terminate in a point of long feathers before the breast; this uncertain violet, graduating into a non-metallic blue, with its velvety very dark tint, is sharply defined on the milk-white of the breast, which extends to the lower part of the neck, so as to form a rather large white collar. The lower part of the breast is white, but the middle of it and the flanks are, like the back, golden green, with which is mingled a little of the greyish colour of the base of the feathers. Back and sides of the head behind, back, and upper tail coverts, metallic golden green; quills, brown; tail, long, narrow, and much graduated; length, four inches and a half, including the long tail and bill."

The humming-birds are exclusively confined to America and the adjacent islands, being found in no other country.

Their food consists of insects, and the honey of flowers. They are bold and spirited, and defend their nests with great courage; darting at the eyes of intruders, and easily defeating feathered enemies far exceeding themselves in size.

Lively and full of energy, these gilded fairies of the feathered race are almost incessantly on the wing, darting from one object to another, and displaying their gorgeous hues in the beams of the sun. When performing a lengthened flight, as during migration, they pass through the air in long undulations, raising themselves for some distance, and then falling in a curve. When about to feed, or in search of a favourite flower, they hover stationary, surveying all around, and suddenly dart off to the object. Bullock observes that "they remain suspended in the air in a space barely sufficient for them to move their wings, and the humming noise proceeds entirely from the surprising velocity with which they perform that motion, by which they will keep their bodies in the air, apparently motionless, for hours together."



SEAL.

THERE are many different species of seals. The common seal is found along the shores of various countries of Europe, and is plentiful on many parts of the English, Scottish, and Irish coasts. These animals feed on various kinds of fish, such as flounders and other flat fish, and commit great havoc among the salmon in the estuary of the River Tees. "This seal is hunted, as are others also, far the sake of its skin and blubber. The fishing commences in autumn, and is practised by means of nets stretched across narrow sounds where the seals are in the habit of swimming. In these nets they are entangled, but it is only the young that can be thus captured; the old ones are shot."

The common seal can remain under water for about five minutes, and swims so rapidly, that if alarmed it will proceed nearly half-a-mile during that period. The seal is intelligent and docile, and easily domesticated; it becomes attached like a dog to its master, and may be readily taught to assist in fishing. Many anecdotes respecting tamed seals are recorded. Few animals have a finer sense of hearing, and musical sounds appear to afford it great delight. Laing, in his account of a voyage to Spitzbergen, states that the violin, when played on board the vessel, would generally draw around it a numerous audience of seals, which would continue to follow it for miles. Sir Walter Scott alludes to the same curious fact in the following lines:—

"Rude Heiskar's seals through surges dark
Will long pursue the minstrel's bark."

The common seal "is gregarious in its habits, and haunts caverns and recesses among the rocks, to which the females retire to breed. The young are generally two in number, and the mother nurses them with great assiduity and affection, taking them out to sea very early. When surprised basking on the shore, which the seal often does, luxuriating in the sun, its first effort is to make for the water; but if intercepted, it shows fight, and with a growl turns on its adversary, who, unless he avoid the attack, is in some danger, for the animal has great power and weight, (often two hundred and twenty-four pounds,) having overset its antagonist, it shuffles to the water, and there disappears. All are familiar with Sir Walter Scott's humorous narrative of Hector Mac Intyre's discomfiture by a "phoca." ("The Antiquary.")

The voice of the seal is a gruff grunt, not unlike that of a pig, but when wounded it often utters a peculiar moaning sound. These animals are sagacious and watchful, and while half-slumbering on the beach, their customary caution seldom leaves them, for one of their number is usually placed a little higher on the rock than the others, and he seems constantly awake, and ever and anon upraises his "grim feature," scenting the windward air."



HARPY EAGLE.

HARPY EAGLE.

THIS is a very noble looking bird, but its name denotes its character; with it, however, we must not find fault, for it is that which God has thought proper to assign to it. Its colour is a light slate grey on the back, and the crest is dusky black; the breast is white, with a band across it of dark slate-colour. The tail is barred with black and slate-colour; the bill and toes are black, and the legs yellow.

“The feathers of the neck, and sides of the head in the harpy eagle are broad and rounded at their anterior margin, and capable of being puffed up; while on the back of the head, the feathers, still of the same character, but longer, form a sort of crest, which the bird can raise or depress at pleasure. The middle feathers of this crest are shorter than the more lateral, so that when erected, it is lowest in the centre, and rises at each side somewhat in the form of ears or tufts; but the proud deportment, and the fierce glance of the eyes redeem the owl-like character thus given to the head. Often have we watched the splendid harpy eagle in the gardens of the zoological society, as he has sat upright on his perch, and motionless as a statue, unmoved by every attempt to intimidate him, or disturb his dignified composure; while the gleam of his eye fixed steadily upon us, betokened at once daring and energy. In strength none equal him: in courage and ferocity none excel him.

But we have seen the harpy eagle under other circumstances. We have seen him feasting on his

slaughtered prey, with his talons buried in the body, and his beak crimson with gore; on our approach, instead of quitting it, he has expanded his ample wings over it, so as to conceal it, and assumed a menacing attitude, as if prepared to contest the possession of it to the utmost; and such was the ferocity and power displayed, as to convince us that any attempt at interference, had it been practicable, would have been a most dangerous undertaking.

The harpy eagle is a native of Guiana and other parts of South America, where it frequents the deep recesses of the forests, remote from the abodes of man. Of its habits, however, in a state of nature, we have but little information. It is feared for its great strength and fierceness, and is reported not to hesitate in attacking individuals of the human race; nay, that instances have been known in which persons have fallen a sacrifice, their skulls having been fractured by the blows of its beak and talons. This may be an exaggeration, but certainly it would be a hazardous experiment to venture unarmed near the nest of a pair of these formidable eagles. Hernandez states that this species not only thus ventures to assault man, but even beasts of prey. According to Maudruyt, it makes great destruction amongst the sloths, which tenant the branches of the forest, and are ill-fitted to resist so formidable an antagonist. It also destroys fawns, covies, opossums, and other quadrupeds, which it carries to its lonely retreat, there in solitude to satiate its appetite. Monkeys are also to be numbered among its victims; but the sloth is said to constitute its ordinary prey."



FOUR-HORNED GOAT.

FOUR-HORNED GOAT.

OF all animals which are reared in a state of domestication, goats are the most picturesque in their appearance, the most lively in their manners, and the most hardy in their constitutions. In one or other of the species, they are found in almost every region of the world. In general, there is a traceable resemblance between the domestic goat and the wild goat of the mountain rocks; but the male is of inferior size, and the hair is of coarser texture. The horns do not incline so much backwards, and the tips are generally turned outwards. Those which may be considered as deviating the least from the natural state, have the hair long and shaggy; but there are others in which not only the shape, but even the number of the horns, differ from those of the wild goat. Some, also, have the ears pendulous; some are without horns, and some have four horns; as in the annexed engraving.

All the species of wild goats have a tendency to climb to as high situations as they can. In a state of nature the whole of them inhabit the mountain tops. In a domesticated state they also seek hilly places, from which they do not descend unless for the purpose of drinking. When mixed with sheep on the same pastures, they invariably take the lead, and their more timid companions generally follow in their track. They are bold, impudent, and capricious, always on the alert, and remarkably observant of every object around them; and if that which they see is novel or dangerous, they instantly put themselves in an attitude of attack. They are among the

most sure-footed of animals, and can pass along ledges of rocks of very narrow dimensions, upon the brink of the most frightful precipices. If two of them meet in a situation where there is no room for either of them to turn, the one crouches down and allows the other to leap over it, after which it rises again, and both pursue their journey with perfect safety.

Bingley mentions a case of two goats meeting on the Torus, or projecting round moulding of the ramparts at the citadel of Plymouth, where the footing was very narrow, and the rampart overhanging the sea; but the one contrived to crouch down, and allow the other to leap over it, so that both pursued their dangerous journey in perfect safety, and in the presence of numerous spectators.

The boldness, dexterity, and hardihood of the goat among rocks, renders the wild goat one of the most dangerous species of game for the mountain hunters. They are exceedingly vigilant; and when alarmed or rendered suspicious, they can escape upwards; and they are said sometimes to throw themselves down upon the hunters, and tumble them upon the rocks, in which case the hunter is dashed to pieces, while the mountain goat falls on its horns, and escapes unhurt.

Goats utter various sounds according to their age, and the feeling with which they are impressed at the time. The kids or young ones bleat, and their bleating, though sharp, is not unpleasant. When the older ones are alarmed, they utter a peculiar sort of whistle; and their general sound, when preparing to repel danger, is an indescribable sort of spluttering.



MAGPIE.

MAGPIE.

THE magpie will be seen, upon a close inspection, to be one of the handsomest of our native birds. It is elegantly pied with black and white, and there is a very rich metallic gloss of green and purple on the feathers of the tail, which, as shewn in the plate, is of more than ordinary size.

In the "Illustrated Family Journal," the following account is given of this bird:—"The magpie is a species of crow, famous for its noise, mimicry, shrewdness, and even theft. It is common generally over Britain and the south of Europe, but seldom seen in Norway. It is omnivorous; builds its nest in the most guarded fashion, and in the strongest and most sheltered trees; has an extraordinary propensity, not only for plundering its neighbour-birds of their eggs, but for stealing and secreting things that can be of no use to it; and may be taught to pronounce whole sentences, and to imitate any particular noise. Plutarch tells a story of a magpie at Rome, that, happening to hear a sound of trumpets, astonished people for a day or two by sitting quite pensive and mute. It was supposed that the trumpets had stunned it. But the bird, it seems, was in a state of profound meditation and study, turning all the sounds and cadences of the trumpets over in its mind, and accordingly having arranged the business to its satisfaction, it burst forth into a perfect imitation of the whole performance, with all its repetitions, stops, and changes. It was observed, however, that this new acquisition totally obliterated all its former ones. Upon the

thieving propensity of the magpie is founded Rossini's "La Gazza Ladra." (The thieving magpie) in which a girl who has parted with some trinket to support her father, is subjected to suspicious of dishonesty under the most cruel circumstances, in consequence of a magpie having secreted some of the articles and money which had been exchanged.

Accidents of a like nature have no doubt frequently occurred in real life, and produced many a painful household perplexity. This, perhaps, is one of the causes of the superstitions entertained respecting magpies in the north of England, the appearance of one of whom by itself is supposed to augur peril to the beholders. If there are two, however, the omen is good; and four of them announce a wedding; yet three bring a funeral. The peril seems to lie in the odd number. The magpie, who is unoccupied with a companion, appears to be thought bent on nothing but mischief."

Let it however be remembered, that all such superstitious notions are idle and vain, as well as wrong, and utterly unworthy of being for one moment entertained either by young or old.



ANT-EATER.

A particular description of this species may serve to give a competent idea of all the rest. In the Leverian Museum was a specimen upwards of seven feet long, and about two feet high. The tongue is thirty inches long; the nose, or snout, is long and slender; and the eyes are small and black, mixed with grey; and generally about six inches long. A black line, bounded with white, extends from the neck across the shoulders to the sides; and the tail is covered with long, coarse, black hair.

When they discover an ant-hill, they approach it slowly and silently, and having taken a favourable position, stretch out their long gluey tongue across the path of the ants. As soon as a sufficient number have overspread the tongue, they draw it into their mouth, repeating the process till their hunger is satiated, when they again retire to their lurking-places.

But, though the animal subsists in this manner, it is said never to get fat, notwithstanding its indolence at those times when it is not feeding. It is capable, however, of enduring great privation in the way of food. The position of repose is that of partially rolling itself into a ball, with the snout doubled on the breast, the legs brought together, the long and bushy tail covering the outer part, and the whole animal having something the appearance of a bunch of withered grass; and probably much of its defence from enemies depends on this position, in which it spends the greater part of its time.

Though the ant-eater avoids all its enemies with diligent care, and never provokes a combat with other quadrupeds, yet, when closely attacked, it will defend itself against the dog, and even the jaguar, by means of its claws, with the most resolute animosity; in short, wherever it fixes, it never relinquishes its hold while it has life.

The great ant-eaters, or 'ant-bears,' as they are sometimes called, are natives of the warmer parts of South America; but they are not numerous in any one locality. The low and swampy grounds, by the sides of streams and pools, or in the forests, are his favourite haunts, though he never either climbs in the wood, or swims in the water.

They are remarkably quiet and harmless animals, living and feeding among the ant-hills. So retired are they, indeed, that they are considered as rare, even in their native forests. The Indians and Negroes eat the flesh of this species, which is not unpalatable, but, as is the case with several others of the ground animals, it has a rank, musky flavour, which is rather offensive to Europeans.

The female brings forth but a single young one at a time, which she carries on her back, and tends and nurses for more than a year.



TERN.

TERN.

THE common tern is one of a rather numerous tribe of aquatic birds. It is found in abundance on the southern shores of England in the summer season, when it may be seen pursuing the shoals of fish on which it feeds.

Nothing can exceed the elegant pounce of this graceful bird, when it drops on the sea, to catch the fish over which, for a second or two, it has previously hovered, "precipitating itself upon its unwary victims with unerring certainty, and rising again to pursue its course as if unchecked by the effort."

The length of the common tern is about one foot two inches, and the expanse of the wings about two feet and a half. The bill, "crimson red," is tipped with black, and about two inches and a quarter in length. The head is covered with a long black patch, which extends over the eyes, and ends in a point below the nape of the neck. The whole of the breast is pure white: the upper part of the plumage is of a very fine pale lead-colour. The quill feathers of the wings are of a deeper hue, the outside ones the darkest. The tail, which is long, and very much forked, is white, excepting the two outside feathers, which are black on the outer webs; but in flying, they are frequently closed together, so as to appear like a single feather. The legs and feet are deep red.

"These birds continue long on the wing, and, in their quick and circling evolutions, they rise and sink in the air, or glide along near the surface of the waters.

They congregate in large flocks, but particularly in the breeding season, when they are more than usually restless; wheeling and redoubling their varied flight high in the air, and uttering their loud screams in clamorous confusion. Some of the species are described as breeding on the shores, and depositing their two eggs upon the bare rock; others lay three or four eggs in the dry sand; and some nestle among the reeds and rushes in the marshy borders of lakes. The young keep the nest a considerable time after they have been hatched, not offering to leave it until their wings have attained sufficient length and strength to enable them to fly with ease. Though almost wholly web-footed, they are seldom seen to swim. The moult occurs twice a year in all the known species.

One kind or another of these birds is met with in almost every part of the world. Latham enumerates twenty-three species, besides varieties."



LONG-SNOUDED TARSIPES.

LONG-SNOURED TARSIPES.

THE tarsipes, so named on account of its feet having a considerable resemblance to those of a little animal found in the Indian Islands, and called the tarsier, is one of the most interesting of animal forms recently discovered. But one species of the genus is known, and that inhabits the west coast of Australia.

This little quadruped is of the size and form of a mouse, but with a long, slender, and pointed muzzle. The eyes are small, of a black colour, and very prominent. The tail is longer than the head and body taken together, and clothed with small stiff hairs, like the tail of a mouse. The colour of the fur varies in different individuals, but is generally grey, more or less suffused with rust-colour on the upper parts of the body.

It is stated by Mr. Gould, that "the tarsipes is generally found in all situations suited to its existence, from Swan River to King George's Sound, but from its rarity, and the difficulty with which it is procured, the natives only brought me four specimens; one of these, a female, I kept alive for several months, and it became so tame as to allow itself to be caressed in the hand without evincing any fear, or making any attempt to escape. It slept during the day, and became active during the night: when intent upon catching flies, it would sit quietly in one corner of its cage, eagerly watching their movements, as attracted by the sugar they flew around; and when a fly was fairly within its reach, it bounded as quick as lightning, and seized it with unerring aim; then retired to the bottom of the cage, and devoured it

at leisure, sitting tolerably erect and holding the fly between its fore-paws, and always rejecting the head, wings, and legs. The artificial food given it was sopped bread, made very sweet with sugar, into which it inserted its long tongue, precisely in the way in which the honey-eaters among birds do theirs into the flower-cups for honey; every morning the sop was completely honey-combed, as it were, from the moisture having been drained from it by the repeated insertion of the tongue: a little moistened sugar on the end of the finger would attract it from one part of the cage to the other; and by this means an opportunity may be readily obtained for observing the beautiful prehensile structure of the tongue, which I have frequently seen protruded for nearly an inch beyond the nose."



NIGHTINGALE.

NIGHTINGALE.

THIS well-known songster, which is common in the woods in some parts of the country, but not in the extreme north, nor in the extreme south-west, being almost unknown in Devonshire and in the northern parts of Yorkshire, is about the size of a lark. Its length is seven inches; the bill brown; the eye hazel; the head and back pale tawny brown; the breast ash-coloured brown; the tail deep tawny red; the quill feathers of the wing brown; their outer webs reddish brown. The legs are long, and of a light brown. The female is rather less in size than the male.

The nightingale is the largest of the warblers that visit this country. It arrives here sometimes in April, but in general not until the beginning of May. Izaak Walton, the always-popular author of the "Lives" and the "Complete Angler," says of this bird, "But the nightingale, another of my airy creatures, breathes such sweet loud music out of her little instrumental throat, that it might make mankind to think that miracles were not ceased. He that at midnight, when the very labourer sleeps securely, should hear, as I have very often, the clear airs, the sweet descants, the natural rising and falling, the doubling and redoubling of her voice, might well be lifted above earth, and say, 'Lord what music hast thou provided for the saints of Heaven, when thou affordest bad men such music on earth.'"

"Nightingales begin to build about the end of April, or the beginning of May; they make their nest in the lower part of a thick bush or hedge. The female

lays four or five eggs, of a greenish brown colour. The nest is composed of dry grass and leaves, intermixed with small fibres, and lined with hair, down, and other soft and warm substances. The business of incubation is entirely performed by the female, whilst the male, at no great distance, entertains her with his delightful melody: as soon, however, as the young are hatched, he leaves off singing, and joins her in the care of providing for them. These birds make a second hatch, and sometimes a third; and in hot countries they are said to have four.

The nightingale is a solitary bird, and never unites in flocks like many of the smaller birds, but hides itself in the thickest parts of the bushes, and sings generally in the night. Its food consists principally of insects, small worms, eggs of ants, and sometimes berries of various kinds. Though timorous and shy, they are easily caught; limed twigs and snares of all sorts are laid for them, and generally succeed. Young ones are sometimes brought up from the nest, and fed with great care till they are able to sing. It is with great difficulty that old birds are induced to sing after being taken; for a considerable time they refuse to eat, but by great attention to their treatment, and avoiding everything that might agitate them, they at length resume their song, and continue it during the greater part of the year."



GENET.

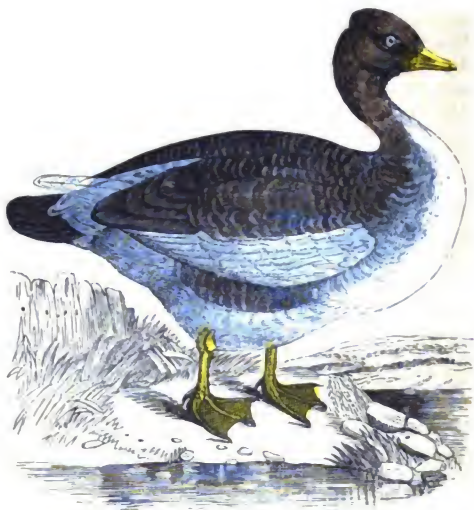
GENET.

THE genet is a native of the south of France, Spain, Africa, and the southern parts of Asia. It is somewhat smaller than the civet, and a little larger than the marten: in its distinguishing characteristics it more resembles the former. It is easily tamed, and as it keeps houses perfectly free from rats and mice, it is of considerable service.

This beautiful species is chiefly to be found along the banks of rivers, the sides of brooks and springs. "It is of a grey colour, spotted with brown or black; the muzzle is blackish, but has white spots on each side of its extremity; on the eyebrows and cheeks are also white spots; the tail is as long as the body, and assimilated with black and white, the black rings being from nine to eleven in number, and the white ones from seven to eight. Some specimens differ in the size and number of their spots, in the bands along the shoulders and neck, and in the lines on the nape of the neck. In all, however, the pouch is reduced to a slight depression, formed by a projection of the glands, and has scarcely any visible excretion, although an odour is diffused from it, which is more faint and agreeable than that of the civet; their nails are completely retractile; and in the light the pupils of their eyes form a vertical fissure.

Belou tells us that he saw genets in the houses at Constantinople as tame as cats; and that they were permitted to run everywhere about, and without doing any mischief; hence they have been called the cats of

Constantinople, although they have little in common with that animal, except their expertness in perceiving and destroying vermin. These domesticated genets are said to be not only gentle and mild, but very cleanly. The glossy fur of the genet forms an important and valuable article of commerce."



GOOSE.

GOOSE.

THERE are several species of goose, from one of which our domestic bird is derived. The weight of the wild goose is eight or nine pounds, and the length about two feet nine inches. The bill is large and elevated, of a very pale pink colour; the eye, greyish; the head and neck, ash-colour, mixed with rust-colour; the back, dusky grey; the breast, dull white, clouded with ash-colour. The wing coverts are of different shades of ash-colour; the tail feathers dusky, tipped with white; the legs very pale pink; the claws black.

The wild goose is widely and numerously spread over all the more northerly parts of the globe, whence some flocks of them migrate a long way southward in the winter. These birds are often seen, in flocks of fifty or a hundred, flying at very great heights, and preserving very great regularity in their motions; sometimes forming a straight line, and at others assuming the shape of a wedge, which is supposed to facilitate their progress. Their cry is frequently heard when they are at a very great distance above us. When on the ground, they range themselves in a line, after the manner of cranes; and seem to have descended rather for the sake of rest than for food. Having continued in this situation for an hour two, one of them, with a long loud note, sounds a kind of signal, to which the rest punctually attend, and rising in a group, they pursue their journey with renewed alacrity.

Mr. Rennie relates the following of two birds of this genus:—"In the "Environs of London," by Mr. Lysons,

an anecdote is given of the partiality of a Canada goose for a yard dog. The goose could only be separated by force from her canine friend, and after his death fell a sacrifice, by endeavouring to possess that seat in the kennel where she had so long been fostered with the kindest friendship by his predecessor.

A similar attachment we recollect of the China goose, the male of which had been killed by a young pointer. Ponto was most severely punished for this misdemeanor, and had the dead bird tied to his neck. The solitary goose became extremely distressed for the loss of her partner and only companion; and probably having been attracted to the dog's kennel by the sight of her dead mate, she determined to persecute Ponto by her constant attendance and continual vociferations; after a little time, however, a strict amity and friendship subsisted between the incongruous animals: they fed out of the same trough, lived under the same roof, and in the same straw-bed kept each other warm; and when the dog was taken to the field, the inharmonious lamentations of the goose for the absence of her friend were incessant."

The common goose, from which our domestic breed is descended, must have been domesticated many centuries; and it is rather surprising that many other species of the larger birds, especially of the aquatic kinds, have not been brought under the dominion of man.



NYIGHAU.

NYLGHAU.

THE nylghau belongs to the family of the antelopes, and is a very singular-looking animal; they appear to be confined to the north-western provinces of the peninsula of Hindoostan, and the countries situated between them and Persia. It is said that in the days of Aurengzebe they abounded between Delhi and Lahore, and formed one of the objects of the chase with that mighty monarch during his journey to Cashmere; his army of hunters inclosing them within a limited space by means of nets. The king and his omrahs, attended by their huntsmen, then entered, and, somewhat after the manner of a modern battu, dispatched them with their arrows, spears, and other weapons.

The following is the account of it that is given by Mr. Linnæus Martin:—"This magnificent species, which stands upwards of four feet in height at the shoulder, is a native of the dense forests of India, where it resides alone or in pairs. It is extremely vicious, resolute, and powerful, and will turn upon its pursuers with great fury. Even in confinement it is not to be approached without caution. Previous to making its attack, it drops upon its fore knees, and in that attitude gradually advances, till within a certain distance of its foe, when it darts suddenly forward with amazing force and velocity. Bold and spirited, however as it is, it is the most common prey of the tiger. During the day the nylghau lurks in the covert of the forest, whence, early in the morning or during the night, it wanders forth to feed, invading the adjacent corn-fields and cultivated lands.

This species is often bred in captivity, both in this country and in India. The female usually produces two at a birth.

The male considerably exceeds the female in size. The general colour is slate blue; in the female, tawny red. The lips, chin, and under parts are white; there is a large white spot on the throat, two smaller ones on the cheeks, and one in the front, and two in the rear of each pastern-joint. The young males resemble the female in colour, which is exchanged for slate blue on arriving at maturity. A bunch of long pendant hair hangs from the fore part of the neck, and a single tuft terminates the tail. The limbs of the nylghau are well formed, but when the animal is standing, they are gathered close under the body, and the tail is drawn in between the hind legs."



PHASANT.

PHEASANT.

THE pheasant is a superbly handsome bird, but is not thought to have been originally a native of these kingdoms, but to have been introduced at some remote period from some foreign country.

Montagu well remarks that the various tints of green, gold, blue, and violet in its plumage exceed description, while they are at the same time too well known to need it. He further adds, "It is a foolish bird, and when roused will frequently perch on the first tree, and is so intent upon the dogs, as to suffer the sportsman to approach very near. At the time they perch they most frequently crow, or make a chuckling noise, by which the unfair sportsman is led to their destruction. The poachers catch them in nooses made of wire, horse-hair twisted, and even with a brier set in the like manner at the verge of a wood; for they always run to feed in the adjacent fields morning and evening. Besides these, they are taken by a wire fastened to a long pole, and by that means taken off their roost at night, or by fixing a bunch of matches lighted at the end of a pole, are suffocated, and drop off the perch. Foxes also destroy a great many, in particular the females when sitting on their nest.

The pheasant is found partially in most parts of England, but not so plentifully in the north, and rarely in Scotland. Wood and corn lands seem necessary to its existence; it is partial to oak and beech woods, on the seed of which it feeds; buckwheat is also a favourite food. In the autumn they frequent turnip-fields. Large

wooded tracts only produce them in abundance, and they mostly frequent the thickest and most impenetrable coverts, or such as are covered with long grass, which the female generally makes choice of to deposit her eggs in, scraping together a few surrounding dry vegetables for a nest, and laying from eight to twelve eggs. The male is frequently heard to crow in spring, clapping his wings at the same time."

Some of the rarer species of pheasant are kept in aviaries in this country. The Golden Pheasant, a native of China, remarkable for the beauty of its plumage, is distinguished by a crest upon the head, which can be raised at pleasure. The prevailing colours of the body are red, yellow, and blue. The iris, bill, and legs are yellow. The tail is longer and more richly tinted than that of the common species; and from above it arise a number of long, straight feathers, of a scarlet hue, mixed with yellow. Another fine species found in China is the Silver Pheasant. This bird is of a silvery white-colour, with very delicate black lines on each feather, and black on the under part of the body. But the most splendid of all is the Argus Pheasant. This species, which is as large as a turkey, is an inhabitant of the mountains of Sumatra, and of some other of the Indian islands. The male has a very long tail; the feathers of the wings are large and long; and both are thickly covered with ocellate spots.



MARMOZET.

THE native country of this elegant little monkey is South America, where it is found in Brazil and Guiana. Its fur is long and soft, and is variegated with yellow, black, and white. The head and throat are dusky black, and the tail is ringed with dusky black and white.

“Little has been recorded respecting the natural habits of this beautiful animal, beyond the facts of its congregating in small families, of being active and shy, and of its subsisting upon insects and eggs, together with fruits, such as bananas and mangoes, of which it is very fond.

It is frequently brought to Europe, and has not only lived several years, but produced young, in the menageries of France and England. Distrustful, especially towards those whom it is not accustomed to see, it retires from observation; and on being touched, utters its peculiar whistling cry, or becomes angry, and resists the unwelcome attempt to court its confidence. When undisturbed, it displays much liveliness, and exerts its activity, leaping from perch to perch with squirrel-like address; and in all its actions justifying the expression of “nimble marmozet” used by Shakespeare. Extremely sensitive to cold, no little of the marmozet’s time is passed in protecting itself against the changes of temperature, to which our atmosphere is subject. All the wool, cotton, or other soft materials with which it is furnished, it will carry to some convenient corner of its cage, or to an inner dormitory, and there completely bury itself in the downy mass, from which it will peep out on a person’s

approach, but from which, unless induced by the offer of tempting food, it can seldom be induced to emerge altogether. When two or three are confined in the same cage, they huddle themselves together, and lie nestled in their bed. The marmozet eats bread, fruits, and finely-minced meat. It feeds in a crouching attitude, and usually holds everything between its two fore-paws, the long hooked nails assisting it."



OYSTER-CATCHER.

OYSTER-CATCHER.

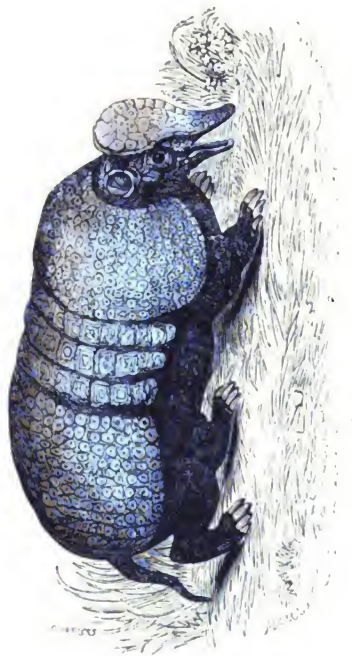
THE oyster catcher is not a very uncommon bird in some parts of the English coasts. It is a very handsome bird, and a writer in *Blackwood's Magazine* observes, "Beautiful and easily domesticated as these birds are, it is surprising that they are not more frequently introduced in our pleasure grounds. Those who have visited Brighton within these few years, may remember the numbers running about without alarm on the lawn of the Pavilion, exhibiting their smart, piebald glossy coats, in full contrast with their long, bright orange beaks and legs, and crimson irides."

The following is the description of this species:—Its weight is "about seventeen ounces; length, sixteen inches; bill, three inches long, straight and compressed; the tip, wedge-shaped; the colour, orange; irides, crimson; orbits, orange yellow. The head, neck, upper part of the back, scapulars, and lesser wing coverts, black; a small spot of white under the eyelid, and a crescent of the same across the throat. The greater coverts are white, the next above them tipped with white; the quills are black, with more or less white on the inner webs; the lower part of the back, the breast, and the under parts are white; the base of the tail is white, the end black; legs, red orange; claws, black.

This bird is common on our shores, but never quits the sea coast. In winter they assemble in small flocks. Their principal food is marine insects and shell-fish; and from their adroitness in getting at an oyster, they have taken this name. This, however, can only be done when

the shells are partly open; it is the bill that is inserted to kill the oyster. It makes no nest, but deposits its eggs on the bare ground above high-water mark; generally four, of an oliveaceous brown, blotted with black, somewhat larger than that of the lapwing. At the time of incubation the male is very watchful, and upon the least alarm runs off with a loud scream, upon which the female instantly runs from her eggs to some distance, and takes wing. It is a shy bird, but when the young are hatched it becomes bolder. The young is capable of running as soon as it quits the egg, and is led by the parent birds to its proper food. These birds are subject to some variation in plumage. In most the white under the chin is wanting; in some that mark is mottled with black, and the white spot under the eyelid wanting. Whether these are varieties, or depending on age or sex, has not been thoroughly ascertained; perhaps both: but both sexes have been killed at all seasons, without the white on the throat. Temminck says that they change their feathers twice in the year; moulting in the spring and autumn, but the colour of the plumage does not seem to change at these times; the only difference consisting in the absence or presence of the white gorget on the throat. There does not appear to be any difference in the sexes in the young: the plumage is dusky; the feathers margined with brown; the eyes of a brownish black; iris, brown; feet of a greyish black.

Dr. Latham observes, it is easily tamed when taken young, and has been known to attend the ducks and other poultry to feed, and shelter at night."



ARMADILLO.

ARMADILLO.

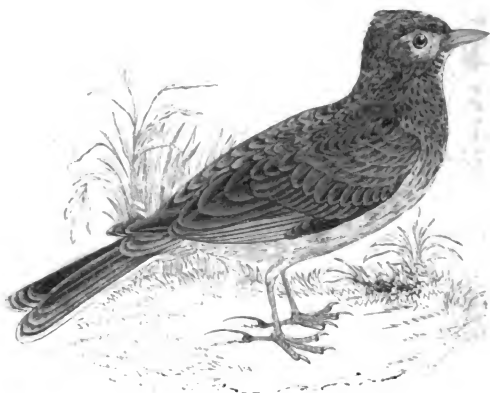
THE armadillos are only found in the American continent. Most of them are nocturnal in their habits, remaining during the day in their burrows, which they are very expert in hollowing out for themselves. "When alarmed during their excursions, the first endeavour of these animals is to gain their burrows, to which they run with a degree of celerity little to be expected from their clumsy appearance.

The food of the armadillos consists principally of fallen fruits, roots, and insects. Azara informs us that ants are never found in the districts inhabited by the armadillos, and that these animals break into the ant-hills, and devour the insects as greedily as the true ant-eaters. Nature, it is true, has not provided them with the same apparatus for this purpose, but the armadillos may, notwithstanding, destroy vast quantities of ants, though it is probable that they expel them from their own peculiar districts, as much at least by destroying the habitations, as by destroying the insects themselves. The ordinary food of the armadillos consists chiefly of the roots of the manioc, potatoes, maize, and other similar substances of a vegetable nature.

The armadillos see but indifferently, particularly in bright sunshiny weather; but their sense of hearing is extremely acute, and amply compensates for any imperfection of sight. When alarmed by any unusual or strange sound, they prick up their ears, stop for a moment to satisfy themselves of its distance and direction, then commence a precipitate retreat to their burrow; or, if that

be too remote, begin to construct a new one. Smelling is, however, by far the most acute of their senses.

The portions of armour which cover these animals, consist of a triangular or oval plate on the top of the head, a large buckler over the shoulders, and a similar buckler over the haunches, while between these solid portions there intervenes a series of transverse bands, overlapping each others edges, and allowing to the body due freedom of motion. Each of these separate portions consists of a multitude of small parts consolidated together, giving the idea of what is called mosaic work, especially on the head and shoulders, the pattern differing in different species."



S. AYLAKE.

SKYLARK.

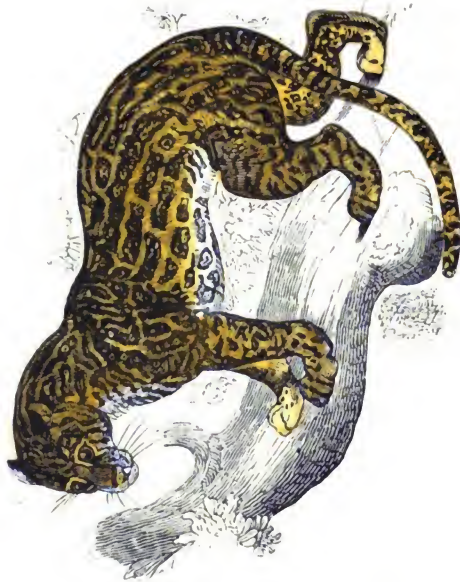
THE skylark is one of the best known of our native species of birds, being universally appreciated for the almost unrivalled excellence of its song. What we lose in this country in the beauty of birds' plumage, we gain in the sweetness of their notes, for no country is so favoured in this respect as ours.

"The length of this species is seven inches; bill, dusky; the base of the upper mandible, yellowish; the feathers on the top of the head are dusky, bordered with rufous brown; they are rather long, and erectable in form of a short crest; the hind part is plain, inclining to ash-colour; on the upper parts of the body the feathers are reddish brown, darker in their middle, their edges pale; the under parts are dull buff-colour, darkest on the neck and breast, which parts are streaked with dusky; quills, brown, lighter on the outer webs and tips; the tail is dusky brown, the two middle feathers darkest, with light rufous margins; the outer feather is white on the outer web and tip of the inner; the second feather white on the outer web only; the third is inclining to white on the margin of the outer web; legs, dusky in old birds, but lighter in the young; claws, dusky, the hind one very large and straight.

The eggs are generally four in number, rather larger than those of a titlark, weighing about fifty grains, of a dull white, blotted and spotted with brown. It begins to breed in May, and will lay as late as September, if the first nests are destroyed."

Two or three instances are recorded of the skylark

moving its eggs under the fear of impending danger; and Mr. Jesse, in the fourth edition of his "Gleanings," adds the following communication made to him by a clergyman in Sussex, who, during a previous harvest "was riding gently towards Dell Quay in Chichester Harbour, with two friends; when having passed the toll-bar, the road is of good elevation, and separated by a short quick-set edge on each side from the fields, over which there was a commanding view. When in this situation, their attention was attracted by a shrieking cry, and they discovered a pair of skylarks rising out of the stubble; and crossing the road before them at a slow rate, one of them having a small bird in its claws, which was dropped in the opposite field at a height of about thirty feet from the ground, and killed by the fall. On taking it up it appeared to have been hatched about eight or nine days. The affectionate parent was endeavouring to convey its young one to a place of safety, but its strength failed in the attempt."



OCÉLOT.

OCELOT.

THE ocelot, a species of tiger-cat, belonging to the general family of the tigers, is about three feet in length of body, and the tail measures about a foot more. Its height is about one foot and a half. It is a native of Mexico, Paraguay, and probably also of Peru—all countries of South America.

Of this species, "the ground colour of the fur is grey, slightly tinged with fawn; upon this are disposed longitudinal bands, of which the margins are perfectly black, the central parts being of a deeper fawn than the general ground. These ribands of black, enclosing a deep fawn, become deep black lines and spots on the neck and head, and on the outer aspect of the limbs. From the top of the head towards the shoulders, there pass several diverging black bands, and on the top of the back the line is quite continuous. The tail is spotted upon a ground like that of the body.

The ocelot is often exhibited in menageries, and is generally good-tempered and playful; we have seen several which might be said to be perfectly domesticated. Bewick states that 'nothing can soften the natural ferocity of its disposition, nor calm the restlessness of its motions. One of these animals, shewn at Newcastle in 1788, although extremely old, exhibited great marks of ferocity. It was kept closely confined, and would not admit of being caressed by its keeper.'

Harsh usage and close confinement have often spoiled the temper of animals, and the fault is always laid to their disposition, and not to mismanagement. Mr. Bennett

informs us that a specimen which was kept in the Tower Menagerie, was extremely familiar, and had much of the character and manners of the common cat. Its food consisted principally of rabbits and birds; the latter it plucked with great dexterity, and always commenced its meal with the head, of which it seemed particularly fond; but it did not eat with the ravenous avidity which characterizes nearly all the animals of this tribe. Of the manners of the ocelot in a state of nature little is known. It inhabits the deep forests, and preys upon small quadrupeds and birds; climbing the trees in quest of the latter, and lying in wait for them concealed among the foliage. It is said to take monkeys by a very subtle mode of proceeding. When it perceives a troop of these active creatures, it immediately stretches itself out, as if dead, on the limb of some tree; urged by curiosity, they hasten to examine the supposed mortal remains of their enemy—the foremost pays dearly for his curiosity."



PETREL.

PETREL.

THERE are several species of petrel, some of them much larger than others. The one before us is a very small bird, and is occasionally met with on the British coasts. It is called by the sailors, "Mother Carey's Chicken," and is proverbial for its braving the severest storms, attending on the ships that are driven before them, following in their wake, and mounting or descending over the surface of the highest billows without fear. Nevertheless, they are sometimes driven to the land by stress of weather, and it is on such occasions that they are for the most part procured.

The common, or stormy petrel, so called, though all of them are of somewhat the same habits, is about the size of a Swallow, and is all over of a sooty black colour, darkest on the back. The feet are webbed.

"As the stormy petrel," says Mr. R. Drossier, "is scarcely ever seen near the land, except in very boisterous weather, one of the natives of the Orkneys agreed, for a trifling remuneration, to traverse the rock and take me some from out its fissures. Accordingly, accoutred with a rope of hemp and hog's bristles coiled over his shoulders, he proceeded to the cliff. Having made one end fast, by means of a stake, he threw the coil over the face of the rock, and gradually lowered himself down, with great caution and circumspection, carefully pressing his feet hard upon the narrow ridges before he loosened his firm grasp of the rope, which he never altogether abandoned. I had thrown myself on my chest to have a better view of him over the

cliff; and, certainly, to see the dexterity and bravery with which he threw himself from one aperture to another was truly grand. The tumbling waves of the Atlantic were foaming many hundred feet beneath, and dashing their curling cream-like surges against the dark base of the cliff, in sheets of the most beautiful white; while the herring and black-backed gull alternately sweeping past him, so as to be almost within reach of his arm, threw a wildness into the scene, increased by the discordant scream of the former, and laughing bark of the latter. This, however, he appeared entirely to disregard; and, continuing his search, returned in about half-an-hour with seven or eight of the stormy petrels, tied up in an old stocking."



PALM SQUIRREL.

PALM SQUIRREL.

THIS animal is said to be common in India, and to be particularly plentiful in the towns and villages, taking up its abode on the roofs of houses and in old walls, in the cavities of which the female deposits her young. They commit great devastations in the orchards, destroying and devouring all kinds of fruit; and are so familiar as even to enter the houses, and pick up the crumbs that fall from the tables. Their name is derived from their being often seen on palm trees, which in the east are always found in the neighbourhood of the habitations of men.

They are social even in their wild state, and, as may naturally be expected, become very good-tempered and familiar in captivity. Clusius, one of the earliest describers of these animals, particularly remarks the tameness of the individuals seen by him, which were so completely domesticated as to be suffered to ramble about at perfect liberty whithersoever they pleased, and so familiar as to take refuge in the bosoms of the sailors of the vessel in which they were brought to Europe. They always eat sitting upright upon their haunches, and convey their food to their mouths between their fore paws.

The palm squirrel is about five inches long, with a tail of the same dimensions. It differs from the other squirrels in the narrowness and elongation of its face, but its formation in other respects is similar. It is of a blackish brown colour above, and white below, with three whitish stripes, one along the dorsal ridge, and two lateral.

Another pretty species, the plantain squirrel, a native

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of Java, is constantly kept by the Javanese as a pet. One which Mr. Adams obtained when visiting that country in the Samarang, he describes as "an amusing little animal, full of frolic, and as playful as a kitten. He never carried his tail over his back, like the greater number of the other squirrels, but would trail it gracefully along the ground. When angry, he would dilate this ornamental appendage, and bristle up the hairs, like an irritated cat. His natural cry was a weak chirping sound, but, when teased beyond his powers of endurance, he would make a sharp, low, and passionate noise. He seemed to court caresses, and would receive them with pleasure. His food consisted of bananas and cocoa-nuts, which he would usually nibble like a rat, though sometimes he would place it between his paws. He was a remarkably cleanly little creature, continually dressing his fur in the manner of the *felinæ*. When he slept, he rolled himself up like the dormouse, with his tail encircling his body. Always active and blithe, he would sometimes perform feats of extraordinary agility, bounding to great distances, and clinging to every object within his reach."



GUILLEMOT.

GUILLEMOT.

THE common guillemot, for there are several different kinds of these birds, is very common on different parts of our coasts. Its length is about one foot five inches, the back is of a general brown colour, the breast white, excepting the upper part of the throat and the chin, which are of the same colour as the back. The legs are dusky brown, the bill and claws black.

The following is the account given of the genus:—The bill, though of a rather slender shape, is firm, strong, and pointed, the upper part slightly bending towards the end, and the base covered with soft short feathers. The legs are placed very far back, and there is no hind toe. They are thick and clumsy birds, and very much at the mercy even of storms when in the sea. They dive with great address, and also catch their prey with no inconsiderable adroitness. During storms they are frequently cast ashore in a state of complete exhaustion, and sometimes they are thrown so high upon the rocks by the surge, that they are unable to get down again until the storm abates.

“Some of the guillemots appear to be very stupid, not becoming cautious from experience, like many other kinds, but suffering themselves repeatedly to be shot at, as if they did not know the danger; for notwithstanding they have seen their associates drop at every fire, they still continue to wheel about in the same circle, and to alight again on the same place where they were first disturbed: others, however, are sufficiently alert. They use their wings when under water.

These birds are numerous spread over various parts of the northern world, whence they are driven by the approach of winter, to seek more temperate climes. At that season they arrive on the British shores, where they remain until they have reared their young. Cuvier says, "Their wings, less fitted for flying than those of the other divers, serve them only to flutter with difficulty." This is not the fact. They fly well and quickly too, and seem to have no difficulty whatever. During the time of nidification they are much on the wing, though in general they seem to prefer swimming."

The guillemots approach the lonely island of St. Kilda about the beginning of February; and by the people there, who live much on sea-birds, their appearance is hailed with pleasure. It is said that on their arrival, they are caught by what seems a very shallow device: the bird-catcher lies down on a ledge of the rock during the night, with a piece of white cloth tied round him; the birds see the cloth more easily than the rock, and alighting on it one after another, numbers of them are captured.



GRISLY BEAR.

GRISLY BEAR.

THE grisly bear is a most formidable animal, and is always much dreaded in the countries where it is met with for its great strength and ferocity. It is a native of the north-western parts of North America, its stronghold being among the rocky mountains, and the district to the eastward of them. It is more than a match even for the bison, and can carry off this huge beast, weighing more than a thousand pounds, to its haunt.

“Lewis and Clarke give the measurement of one of these bears as nine feet from nose to tail, but had seen them of larger dimensions. They attain the weight of eight hundred pounds. The length of the fore foot is nine inches, of the hind foot twelve, without including the enormous claws; its breadth seven inches. The tail is short, and lost in the shaggy hair. The grisly bear digs with great facility, but when adult, is not capable of ascending trees, (a fortunate circumstance for the hunter,) for such is the animal's tenacity of life, that it seldom falls until it has received many balls. It would seem, though the adult grisly bears cannot climb trees, that the cubs are able, if the reports of the Indians are to be credited. The cubs, and females with young hybernate; but the older males often come abroad during winter for food. An individual of this species, distinguished by his enormous size and ferocity, some time since attracted the attention of all who visited the Gardens of the Zoological Society. He had previously been almost twenty years in the Tower, where, at the breaking up of the menagerie there, he was presented

by his Majesty William IV. to the Society. His morose indomitable temper was never subdued, but remained unaltered, as if he had been at large, surrounded by the savage rocks and gloomy pine forests of his native regions."

Mr. Drummond, in his excursions over the Rocky Mountains, had frequent opportunities of observing the manners of the grisly bears; and it often happened that in turning the point of a rock, or sharp angle of a valley, he came suddenly upon one or more of them. On such occasions they reared on their hind legs, and made a loud noise, like a person breathing quick, but much harsher. He kept his ground without attempting to molest them; and they, on their part, after attentively regarding him for some time, generally wheeled round, and galloped off; though, from their known disposition, there is little doubt that he would have been torn in pieces, had he lost his presence of mind, and attempted to fly.



COCKATOO.

THE cockatoos are somewhat like the macaws: they are natives of Australia and the Indian Islands, where they inhabit the woods and forests of these luxuriant climes. They feed upon the seeds of various trees and plants, being able, with their powerful bills, to break the stones of the hardest fruits.

The general plumage of the lesser sulphur-crested cockatoo is white, slightly tinted upon the breast, sides, and inner wing coverts with pale sulphur yellow. The crest is of a fine sulphur yellow. The legs and toes are grey; the irides, red. They make their nests in the rotten limbs of trees, of nothing more than the vegetable mould formed by the decayed parts of the bough; and lay no more than two eggs at a time, which are white, and without spots. The situation of these nests is readily discovered by the conspicuous heaps that lie upon the ground beneath some adjoining tree, from which the old birds cut a quantity of small branches when their young are nearly fledged, strip off their bark, and dividing it into shreds, deposit it in heaps upon the ground. Their breeding-places appear to be local, and the flesh of the young is said to be good eating.

"As may be readily imagined, this bird is not upon favourable terms with the agriculturist, upon whose fields of newly-sown grain and ripening maize it commits the greatest devastation; it is consequently hunted and shot down wherever it is found, a circumstance which tends much to lessen its numbers. It is still, however, very abundant, moving about in flocks, varying from a hun-

dred to a thousand in number, and evinces a decided preference to the open plains and cleared lands, rather than to the dense brushes near the coast. Except when feeding, or reposing on the trees after a repast, the presence of a flock, if not seen, is certain to be indicated by their horrid screaming notes; the discordance of which may be slightly conceived by those who know the peculiar loud, piercing, grating scream of the bird in captivity, always remembering the immense increase of the din occasioned by the large number of the birds uttering their disagreeable notes at the same moment; still I ever considered this annoyance amply compensated for by their sprightly actions, and the life their snowy forms imparted to the dense and never-varying green of the Australian forest; a feeling participated in by Sir Thomas Mitchell, who says that amidst the umbrageous foliage, forming dense masses of shade, the white cockatoos sported like spirits of light."



WALRUS.

THE walrus is a very large and singular animal of the seal tribe. It inhabits the icy regions of the north, where large herds of them assemble on the rocks, or frozen waters of those cold regions.

The body of the walrus is large and unwieldy; its skin is very thick, smooth, and of a blackish colour; the neck is very short; the ears, which are not visible externally, are placed far back in the head; the eyes are small and bright, the head very small in proportion to the bulk of the body; the hind feet or flappers are broad; and the tail is very short. The canine teeth, as shewn in the figure, are powerful weapons of defence, being very strong, and from eight to fourteen inches in length, and in old animals they are sometimes even much longer; they have been known as much as six inches and three-quarters in circumference. The walrus feeds on the vegetable productions of the ocean, and also on crustaceous and mollusious animals.

"In the arctic regions the flesh of the walrus is held by the natives in great estimation; Sir Edward Parry remarks that the flesh was tolerably good, affording variety amid the ordinary sea-fare. The ivory is finer than that of the elephant, the skin makes excellent carriage harness, and the oil is valuable, though only from twenty to thirty gallons are yielded by a single carcass. Its blubber, as Crantz says, being white and solid like bacon, and a hands-breadth thick, but not giving out much fluid oil. Seal's flesh, says Crantz, supplies the Greenlanders with their most palatable and substantial food;

the fat furnishes them with oil for lamp-light, chamber and kitchen fire; and whoever sees their habitations presently finds that, even if they had the superfluity of wood, it would not be of use; they can use nothing but oil in them. They also mollify their dry food, mostly fish, with oil; and, finally, they barter it for all kinds of necessaries with the factor. They can sew better with fibres of the seals sinews than with thread or silk; of the skins of the entrails they make window curtains for their tents, and shirts; part of the bladder they use as a float to their harpoons, and they make oil-flasks of the stomach. Neither is the blood wasted, but is boiled up with other ingredients, and eaten as soup.

Of the skin of the seal they stand in the greatest need, because they must cover with seal skins both the large and small boats in which they travel and seek provisions. They must also cut out of them their thongs and straps, and cover their tents with them, without which they could not subsist in summer. No man, therefore, can pass for a right Greenlander who cannot catch seals. This is the ultimate end they aspire at in all their device and labour from their childhood up."

To the Greenlander, then, the sea is his pasturage, where his flocks and herds are fed—the sea is his hunting-domain, where in his light kajak, he skims over the waves.



GOLDEN-CRESTED WREN.

GOLDEN-CRESTED WREN.

THIS is one of the smallest species of British Birds. Its weight seldom exceeds eight grains. Its length is three inches and three-quarters; the bill is very slender, and black; the eye, hazel. The crown of the head is extremely beautiful, being streaked with a crest, which is composed of a double series of feathers, arising from each side, and almost meeting at their points: the outside ones are black, the inside ones bright yellow, between which, on the crown, the feathers are shorter, and of a fine deep orange. The forehead, the chin, and the feathers round the eye are whitish. The hind part of the head, of the neck, and also the back are greenish; the breast is brownish white; the tail a little forked, the feathers, dusky edged with yellowish green.

"This minute species," says Montagu, "braves the severest winters of our climate, being equally found in all parts during that rigorous season, and is by no means so scarce as it is supposed to be; but, from its diminutive size, it is seldom noticed. It would, in all probability be much more plentiful, but from some cause which we have not been able to discover. The female is frequently destroyed at the time of its incubation, and the nest with the eggs left to decay. Bechstein informs us that these beautiful birds are spread over the whole of Europe and Asia; its favourite haunts being the extensive pine and fir forests of the North of Europe, from whence they migrate towards the south on the approach of winter. In the month of October they are observed in Germany, passing towards the south,

and returning again in the month of March towards the north. In that country, however, flocks of them reside during the whole year, uniting together as the year advances, and searching out those spots where their food, which consists of small insects, is most abundant. He adds, that they are easily taken by cautiously approaching the branch on which they generally perch themselves, and touching them softly with a lime twig, attached to a stick of sufficient length to reach them, the gentle creatures become unresisting prisoners. When taken they are easily tamed, and will, in a very short time, take their food from the hand; but such is their extreme delicacy, that many die before one can be reared: once accustomed to confinement, they have been known to live a considerable time."

A pair of these birds in the collection of Mr. Luscombe, of Kingsbridge, were of a cream-colour, with the usual yellow crown, by which the sexes are distinguished. The song, which is short, weak, and with little variety, is repeated at short intervals throughout the day, in spring, and until it has young.



SERVAL.

THIS is another animal of the cat or tiger kind, and the following is the account of it given in the "Pictorial Museum of Animated Nature:"—

"The serval is a native of Southern Africa, and is not uncommon in menageries; specimens are living in the gardens of the Zoological Society of London. It is frequently very tame and playful, gambolling like a kitten, and enduring captivity without sullenness, or a display of ferocity. The disposition of the feline race greatly depends on the treatment they experience, so that while some are savage and distrustful, others of the same species are familiar. Some species, however, are more easily reclaimed than others, and of these we may count the serval.

The serval stands about eighteen inches in height at the shoulders; the length of the head and body is thirty-four inches, that of the tail ten inches. The upper parts are of a clear yellowish white with black spots; the lower parts are white, spotted more distinctly with black. Symmetrical lines adorn the head and neck, directed towards the shoulders; the back of the ears is black at the base, then barred transversely with white, and tipped with yellow; on the inside of the fore limbs are two black bars; tail, ringed with black.

The general form is slender, and the limbs are thin; the head is long, compressed, and viverrine in its character; the ears are large and broad, and their bases nearly meet each other on the top of the head, giving a singular expression to the physiognomy. In some

specimens the markings are more decided than in others. Our measurements are taken from one of five specimens in the museum at Paris."



KINGFISHER.

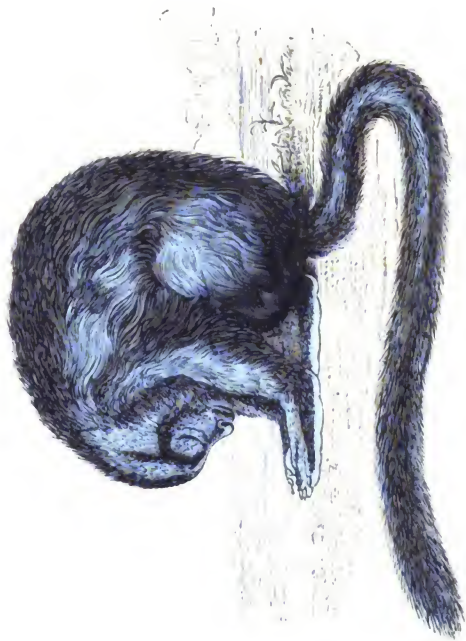
KINGFISHER.

THIS well-known, though not very common British Bird, is one of the gayest coloured that our country can boast of. The shape of the bird is not perhaps in itself elegant, but it pleases from its singularity, and no doubt is appropriate to the garb in which it is attired.

The kingfisher is of a rust-coloured red on the breast, and its back is of a most beautiful iridescent colour, varying in different lights from green to blue.

This species "frequents the banks of streams of various sizes, whether rivers or brooks; sometimes inhabiting the vicinity of fishpounds; and the bird is most frequently seen when flying rapidly near the surface of the water. Its food consists of water beetles, leeches, minnows, sticklebacks, and probably any other species of small fish which it can seize upon by surprise. For this purpose the kingfisher takes a station near the water, sitting on the branch of a bush or tree overhanging the stream, or on a rail by the water side; from whence it darts instantaneously upon any passing prey; and will occasionally suspend itself on the wing, hovering and watching for a favourable opportunity to make the plunge which is to secure its victim. The prey is always taken with the beak; and so unerring is the aim, that the bird seldom fails to gain the fish it strikes at; which, when thus captured, is brought to the usual waiting-place; and after some mutilation to produce death, is invariably swallowed head foremost. The kingfisher is solitary in its habits, and pugnacious in its disposition, seldom to be seen with any associate except its mate during the breeding

season. At this period a pair take possession of a hole, already formed by some burrowing animal, in the bank by the water side, and often but little elevated above the surface of the stream; sometimes the kingfisher will take to a cavity among the exposed roots of an aged tree on the river bank. They have been known to take possession of a hole in a bank, frequented by sand martins at a distance from water; and Mr. Jesse relates in his "Gleanings," that in the summer of 1834, one of the workmen employed in the Gardens of Hampton Court Palace, discovered a kingfisher's nest in the bank of a small gravel-pit in the wilderness of that place, and within a short distance of the public footpath leading through it, and which is much frequented. There were six eggs in the nest, which was composed as usual of small fish bones, and was placed about two feet in the bank. The small gravel-pit was perfectly dry, and the workmen were in the constant habit of throwing the sweepings of the garden into it. The old birds shewed but little fear of the workmen, and this led to the discovery of the nest."



DOUKOUCOULI.

DOUROUCOULI.

ACCORDING to Humboldt, the celebrated traveller, the douroucoulis inhabits those dense forests of South America, which are to be found near the Cassiquiare and Esmeralda, at the foot of Mount Duida, and in the neighbourhood of the cataracts of Maypures, about three hundred leagues from the coast of French Guiana.

The animal is described as being nocturnal in its habits, and as sleeping during the day. "It is greatly incommoded by light, and seeks the holes of trees, or similar places for concealment. When roused, it is dull and oppressed, and can scarcely open its large white eyelids. Its attitude, during repose, is crouching. On the approach of dusk, all the lethargy of the douroucoulis leaves it, and it becomes restless and impetuous, and roams about in quest of insects and small birds. In addition to these, various fruits, seeds, and vegetables constitute its food; but the solid quantity of aliment it consumes is comparatively little; it drinks even less, and but seldom.

It glides, cat-like, through apertures so narrow as to appear incapable of admitting it, and its actions resemble those of viverrine animals. Its beautiful glossy fur is in great request: the natives make tobacco-pouches and other articles of it, which they sell. A male and female are often taken together in the same hole asleep; for the douroucoulis lives not in troops, but in pairs, and is strictly monogamous. The nocturnal cry of this animal is exceedingly loud and sonorous, and resembles that of the jaguar: besides this, it utters a mewling noise like

a cat, and also a deep, harsh guttural note, represented by the syllables 'quer, quer.' When irritated, its throat becomes distended; and in the posture then assumed, and in the puffed state of the fur, it resembles a cat attacked by a dog."

The general colour of the douroucouli is greyish brown above, and pale rufous beneath; the tail is black at the end; the face dusky; the nails black. The eyes are large; the head round.



SATIN BIRD.

SATIN BIRD.

THE following is the account given of this splendid species. The male is of a rich brilliant blackish blue; the quills and tail feathers black; a double row of silky and velvety bluish black feathers at the base of the beak: length, thirteen inches. In the female, the upper parts are of an olive green; the quills and tail feathers of a red brown; the wing coverts varied with brown and dusky olive; the under parts greenish, barred with black; the front of the neck marked with whitish horizontal spots, bordered with black dashes.

The satin bird frequents the cedar-brushes and dense thickets of New South Wales, to which district it appears to be confined. In its habits it is shy and recluse, and few males are to be seen in their brilliant plumage, which is not attained until the third year. Flocks of young birds, however, resembling the female in plumage, are occasionally to be seen on the skirts of the brush, but the adult birds are not to be observed without care and perseverance. This is one of the bower-building birds, constructing a bower or run by means of two short parallel hedges, composed of twigs interlaced together, so artfully arranged that the inner aspect of each artificial hedge is smooth, offering no impediment to the passage of the birds, while the outside is rough with the projecting ends and bifurcations of the twigs. The floor of this run, or short avenue, consists of sticks strewn with shells and bones, and the bower itself is ornamented with the brilliant feathers of various paroquets. Here the birds play, and sportively pursue each other, perpetually tra-

versing the avenue. This, however, is not their nest, which is so artfully concealed that it has not been discovered even by the sharp-eyed natives. The satin bird utters two different strains; one of rich and melodious notes, the other a harsh cry, indicative of alarm or anger.

Mr. Gould says of the bowers of another species of this genus, the spotted bower-bird, "They are considerably longer and more avenue-like than those of the satin bower-bird, being in many instances three feet in length. They are outwardly built of twigs, and beautifully lined with tall grasses, so disposed that their heads nearly meet; the decorations are very profuse, and consist of shells and bones. Evident and beautiful indications of design are manifest throughout the whole of the bower and decorations formed by this species, particularly in the manner in which the stones are placed within the bower, apparently to keep the grasses with which it is lined fixed firmly in their places. These stones diverge from the mouth of the run on each side, so as to form little paths, while the immense collection of decorative materials, bones, shells, etc., are placed in a heap before the entrance of the avenue, this arrangement being the same at both ends."



ELK.

THE following account of the elk is taken from some "Notes and Observations in Natural History," during a tour in Norway, by the Rev. Alfred Charles Smith, M.A. He says, "The elk is a most ungainly-looking animal; long-legged, very high shouldered, large footed, with a neck very short, and a head very large, and its upper lip projecting, and very thick: it is the most awkward creature imaginable, and seems scarcely to belong to the usual elegant and light family of which it forms a part. In size it exceeds a horse, sometimes reaching as much as seven feet in height; its horns, though not long, are very thick, flat, and heavy; indeed the animal must require its thick, short neck, and strong, ugly, large head, to support so ponderous a weight; a pair which I brought home with me were enormously heavy; and with these broad palmated horns the elk throws back the snow in searching for food.

This animal is by no means numerous in Norway, and a few years since seemed likely to be exterminated; but the government, anxious to preserve so noble a species of game, passed some very stringent laws for its preservation, imposing a very heavy fine on those who should violate them; and since that time it has increased considerably in number. The forests of the Glommen are said to be peculiarly favoured by their presence; and I can bear witness to the truth of this, from the number of heads I saw nailed up over the farm-houses in this district; it being a regular custom in Norway for the successful sportsman to nail up over the door of his dwelling-house

such trophies of the chase as he may have gained in hunting, just as gamekeepers in England nail stoats, weasels, hawks, owls, jays, etc., to the barn, which forms their museum. An intelligent farmer in this valley assured me he had killed two of these scarce animals within so many weeks; and promised to shew me some sport if I would make a hunting expedition with him, an offer I was most reluctant to decline; but the day of my departure from the country was at hand, and I was compelled to push on for Christiana.

The elk prefers the forest for his abode, and seldom leaves it for the open country. He is very timid, and consequently very difficult to approach; and he has the finest possible sense of hearing, seeing, and smelling, as indeed he might be expected to have, with ears and eyes so large, and nose so prominent; and away he goes, crashing along through the trees of the forest in his enormous strength, and with his large awkward body, the instant his acute ears, or eyes, or nose give him warning that danger is at hand."



BLUE AND YELLOW MACAW.

BLUE AND YELLOW MACAW.

How astonishingly beautiful are vast numbers of the productions of nature, and even those that are least pleasing to our eyes are equally wonderful.

There is perhaps no class of birds which exhibits more splendid colours than the macaws—one hardly knows which of some of them is the most gaudy.

The blue and yellow macaw is described as follows:—“Bill, black; cheeks, white, with three narrow lines of black velvety feathers passing obliquely across. Beneath the under mandible is a broad black band, extending some distance under the naked cheeks. General colour above, rich blue, passing into green on the forehead, and some of the wing coverts, greater quills, and tail, nearly violet; wings and tail beneath, yellow; under parts generally of a rich saffron tint; iris, yellowish; legs, dusky. Length, about thirty-nine inches, of which the long graduated tail measures about twenty-four inches.

The macaws are natives of the warmer regions of South America, and are among the largest of the parrot race. They are easily domesticated, and become very gentle and familiar; but in their powers of imitation they fall very short of the true parrots and paroquets; their natural cries are harsh, discordant, and piercing, and the few words they are occasionally taught to utter are pronounced in a disagreeable tone. The beak is of enormous size and strength; the cheeks are to a greater or less extent bare; the nostrils are concealed; the under mandible is very deep. The plumage is remarkable for gaudy colouring.

The blue and yellow macaw is a native of Brazil, Guiana, and Surinam, tenanted the swampy forests along the banks of rivers, and generally living in pairs, though sometimes they assemble in large flocks. Their food consists principally of the fruit of a kind of palm, abundant in humid or marshy places.

On the wing, the blue and yellow macaw is rapid, displaying great address and ease in its aerial movements, and is often seen skimming over the tops of the loftiest trees, the highest branches of which it selects for its roosting-place, like the parrots generally. This macaw lays two white eggs in the hollow of a decayed tree; both sexes attending to the duty of incubation, and the labour of rearing the young. Two broods are said to be produced annually."



GROUND SQUIRREL.

GROUND SQUIRREL.

THIS pretty little animal, from its bearing some resemblance to the dormouse, not only in its external form, but also in its habits, was named by Pennant, the striped dormouse.

It seems to be easily tamed; thus it is related of one which Mr. E. H. Greenhow had opportunities of observing, that it "played about, regardless of the persons to whom it was accustomed, but was always timid before strangers, skulking into a corner of its cage, and burying itself in some dry grass placed there for its bed. It had a very shrill whistling cry, which it repeated at intervals as it jumped against the wires in front of its cage. It was exceedingly nimble, and could get through very small crevices, frequently escaping by pressing asunder the wires, and on these occasions was very difficult to re-capture, but if allowed to run about the room for some time, would attempt to re-enter its cage of its own accord."

Mr. Henry Doubleday says, "There are many ground squirrels in the woods. There is one so tame as to come into the house. He came to me a few days ago as I was sitting in the porch, and ran over my boots, examining them very attentively; then he disappeared through a grating into the dairy, where he goes to drink the milk; then he ran up the piazza, and round the house: he often steals almonds, etc., from our dining-room."

Mr. R. E. Taylor says that the grey squirrel, black squirrel, ground squirrel, and red squirrel, which are

extremely numerous in the woods at the north-eastern extremity of the Alleghany Mountain range, "are eaten as great delicacies, particularly the two former species. On account of the great damage they do to the grain and corn, they are mercilessly destroyed, shooting-matches frequently taking place for this object. On June 8th., 1835, a match was decided between twenty men on each side, in Lycoming Valley, who, during three days, were to shoot the greatest number of squirrels and other destructive animals. At this meeting were produced two thousand six hundred and fifty-seven head of all denominations coming under this class. Nearly at the same time, in the adjoining county of Tioga, another squirrel-match took place. The winning side brought in no less than one thousand seven hundred and thirty-two, and the losers produced one thousand and thirty-five, squirrels, the total number being two thousand seven hundred and sixty-seven."



GULL.

THERE are a number of different species of gulls, or sea-gulls, as they are commonly called, many of them very common on the English coasts. Among these may be enumerated the greater black-backed gull, the lesser black-backed gull, the kittiwake, the herring gull, and the black-headed gull.

In this genus, "the bill is strong and straight, but bent downwards at the point; the nostrils are pervious, oblong, and narrow, and placed in the middle; the lower mandible has an angular prominence on the under side, which tapers towards, and forms its tip. The body is clothed with a great quantity of down and feathers, which, together with the large head and long wings, give these birds an appearance of bulk, without a proportionate weight. The legs are small, naked above the knees; feet webbed, with the back toe detached, and very small.

This genus, which some naturalists have described as consisting of about nineteen species, besides a few varieties, is numerously dispersed over every quarter of the world; and is met with, at certain seasons, in some parts, in multitudes. Their eggs are gathered by the inhabitants in prodigious numbers. They assemble together in a kind of straggling mixed flocks, consisting of various kinds, and greatly enliven the beach and rocky cliffs by their irregular movements, whilst their shrill cries are often deadened by the noise of the waves, or the roarings of the surge. They occasionally take a wide range over the ocean, and are met with by navi-

gators many leagues distant from the land. Their plumage, which in each individual of the species varies with its age, is clean and agreeable; but their carriage and gait are ungraceful, and their character is stigmatised, (though somewhat unjustly,) as cowardly, cruel, lazy, thievish, and voracious; for which reason they have by some been called the vultures of the sea; and it is certain (though this trait is not peculiar to them,) that the stronger will rob the weaker kinds, and that they are all greedy and gluttonous, almost indiscriminately devouring whatever comes in their way."



ALPINE MASTIFF.

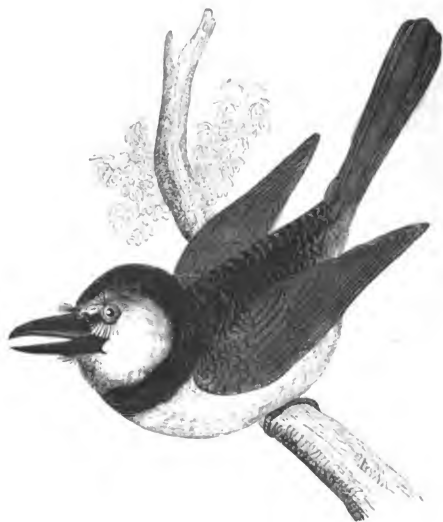
MOST persons in the civilized world have heard of the dog, or rather of the dogs of St. Bernard, a race so called from their being reared at the convent of the Great St. Bernard, and trained to the charitable work of rescuing travellers, who may have been overtaken and overpowered by snow-storms, from the certain destruction, to which, without the aid of these sagacious and powerful animals, they would beyond doubt be exposed.

“One of these noble dogs was decorated with a medal, in commemoration of his having saved the lives of twenty-two persons, who but for his sagacity, must have perished. He was lost in 1816, in an attempt to convey a poor traveller to his anxious family. The man was a Piedmontese courier, who arrived at St. Bernard in a very stormy season, labouring to make his way to the little village of St. Pierre, in the valley beneath the mountain, where his wife and children lived. It was in vain that the monks attempted to check his resolution to reach his family; they at last gave him two guides, each of whom was accompanied by a dog, of which one was the remarkable creature whose services had been so valuable to mankind. Descending from the convent, they were in an instant overwhelmed by two avalanches, and the same common destruction awaited the family of the poor courier, who were toiling up the mountain to obtain some news of their expected friend: they all perished.

A story is told of one of these dogs, which, having

found a child unhurt, whose mother had been destroyed by an avalanche, induced the boy to mount upon his back, and thus carried him to the gate of the convent. The subject is represented in a French print."

All dogs indeed are most intelligent animals. The Newfoundland dog, the spaniel, the pointer, the terrier, are all in their way most sagacious: no species, however, excels the shepherd's dog. The skill evinced by these animals in keeping their master's flocks together is perfectly astonishing. Various most remarkable instances of it are on record. Even when another flock of sheep meets the one of which a dog of this kind has the charge, he will not allow a single one of his own to get mixed with the stranger's, but will keep them entirely distinct.



PUFF BIRD.

PUFF BIRD.

THE great-billed puff bird is allied to the woodpeckers. The head is large, the tail short. All the recorded species are American. The one before us is a native of Brazil, in South America.

Mr. Swainson, the celebrated naturalist, in his "Zoological Illustrations," gives the following account of the habits and disposition of these birds, whose character he had himself had an opportunity of studying in their native regions.

He says, "There is something very grotesque in the appearance of all the puff birds; and their habits, in a state of nature are no less singular. They frequent open cultivated spots near habitations, always perching on the withered branches of a low tree, where they will sit nearly motionless for hours, unless, indeed, they desery some luckless insect passing near them, at which they will immediately dart, returning again to the identical twig they had just left, and which they will sometimes frequent for months. At such times the disproportionate size of the head is rendered more conspicuous by the bird raising its feathers, so as to appear not unlike a puff ball: hence the general name they have received from the English residents in Brazil, of which vast country all the species, I believe, are natives.

When frightened, this form is suddenly changed by the feathers lying quite flat. They are very confiding, and will often take their station within a few yards of the window. The male and female are generally near

each other, and often on the same tree."

Another group of birds, allied to the puff birds, is that of the barbets. They are distinguished by the beak being large, conical, swollen at the sides of its base, and garnished with five tufts of long bristles, one on each side over the nostrils, one at the angle of the beak, and a single brush under the chin. The wings are short, the general proportions heavy, and the flight low. They live on insects and fruits, and breed in the holes of trees. They associate in small flocks, which separate during the breeding season into pairs. Many are richly coloured, such for example is the *bucco grandis*, a native of China and range of the Himalayan mountains. The head, neck, and throat are deep steel blue, changing in some lights to rich green; the back and chest are rich olive brown; the tail is green, as are the quills on their outer edges; the under surface is greenish, with dashes of brown and grey; the under tail coverts are scarlet.



HYÆNA DOG.

HYÆNA DOG.

THE hyæna dog, which, according to some naturalists, forms not only a distinct species, but a separate genus, is a wild unreclaimed native of South Africa, and infests the frontier settlements at no great distance from the Cape, to a very extensive and troublesome degree. Mr. Burchell, who brought the earliest specimen to this country, states "that it hunts in regular packs, preferring the night, but frequently pursuing its prey even by day. It is not only exceedingly fierce, but also remarkably swift and active, insomuch that none but the fleetest animals can escape from its pursuit. Sheep, oxen, and horses appear to be its favourite game: on the former it makes its onset openly and without fear, but of the latter it seems to stand in awe, and attacks them only by stealth, frequently surprising them in their sleep, biting off the tails of the oxen, for which it has a particular fancy, and inflicting such serious injuries upon the horses, especially the young colts, as they rarely survive."

The individual brought home by Mr. Burchell was kept by that gentleman, chained up in his stable-yard, for more than a year, at the expiration of which its ferocity continued unabated, the man who fed it being so fearful of it, that he "dared never to venture his hand upon it." It is however, probable that with a bolder treatment it might have been in some degree tamed, if not domesticated; for it is stated that it at length became familiar with a dog, which was its constant companion. One which was kept in the Tower

of London, was brought to England in company with a young Cape lion. They agreed together extremely well; but as the lion increased in size, his play became too rough for his comparatively feeble companion, who was borne to the earth in a moment by the superior weight and strength of his antagonist: it was therefore found necessary to consign them to separate dens.

In size and form the hyæna dog is smaller and more slender than either the hyæna or the wolf. Its ground colour is of a reddish or yellowish brown, mottled in large patches along the sides of the body and on the legs, with black and white intermingled together. Its nose and muzzle are black, and it has a black line passing from them up the centre of the forehead to between the ears, which are very large, black, both within and without, and furnished with a broad and expanded tuft of long whitish hairs. The tail is of moderate length, covered with long bushy hair, and divided in the middle by a ring of black, below which, or towards the extremity, it is nearly white. These colours and markings vary in different individuals.



STARLING.

STARLING.

THE starling is a very common and well-known British bird. It is also a very handsome one, being of a rich deep purple black colour, with shades of metallic green, and spotted more or less all over with white spots. The older the bird, however, the fewer the spots, so that in age it has but very few, if any. The young bird too is without spots, being entirely of a uniform dull dark brown colour, so unlike to the dress which it afterwards assumes, that it was formerly thought to be a different species, and was so described under the name of the solitary thrush.

These birds "are found abundantly in all the lower parts of Britain, and in the most northerly of the islands; they mingle freely with most flocking birds, and do not hesitate to alight in numbers among domestic animals in the meadows and other pastures. They are partial to humid places, and do not very much frequent the elevated and arid moors; and in the cold season they migrate in vast numbers to the low and warm countries, and to the shores of the sea. They are, at all seasons, very lively birds, whistling, chattering, and gliding about on the wing, which they generally do in curves, and with a smooth motion. On the ground they walk neatly, and with considerable velocity, but do not hop. The starling is the smallest of all our resident birds allied to the crow tribe, and it is one of the least rapacious, confining itself to insects and seeds, (chiefly the former,) like the chough, and never killing other birds, or probably robbing any nest. It has been accused

of breaking the eggs of pigeons, when it takes shelter in the pigeon-house from very severe weather; but as that would be a violation of the laws of hospitality, as well as of the customs of the starling, the friends of the bird very properly repel it as a calumny.

When they are in the low districts, and in large collections, a flock of starlings, preparing to lodge themselves in the tufts for the night, put one something in mind of a dog, preparing to lie down in a place to which he is not accustomed. They wheel round and round; first in the circumference of a circle, but that circle narrows, and the whole mass revolves round a circle within itself, before it drops, and disappears for the night.

Starlings not only associate with other birds, but imitate their cries—chattering with jackdaws, whistling with plovers, and screaming with sea-fowl."



SHETLAND PONY.

THE shetland pony is a small variety, perhaps the smallest, of the horse kind: probably the severity of the climate has some influence in producing the effect which is thus developed. It is a strong and hardy little animal, the north being generally more productive of hardiness than the south, which is considered to have rather a tendency to enervate and weaken; and it is also docile and tractable. These small animals are not, however, to be considered a degenerate breed; for they are, in point of fact, possessed of physical strength, much greater in proportion to their size than larger horses; and no horse whatever is able to carry weight for inches with them: these horses are called in the Highlands, garrons. Till very lately, these poor little animals were broken in a very harsh, and even cruel manner. People tied a rope round their hind leg, and beat them most unmercifully with a great stick, while the horse kicked furiously, and struggled violently for his liberty, and sometimes the garron would lie down, and sometimes the highlander, and often both together, but still the men generally kept their hold.

Miss Sinclair, in her account of "Shetland and the Shetlanders," says of these well-known and interesting little animals, "They are chiefly running wild among the distant unenclosed hills of that island. When well fed from an early age, they grow nearly to the height of a donkey; but some years ago, Mr. Hay reared a perfectly well-formed pony, which measured only twenty-six inches high—not so tall as a moderate-sized hobby horse! I

have heard sportsmen talk in praise of a horse that would canter round a cabbage-leaf, but here was one literally capable of doing so. The very largest men ride these tiny little creatures, which appear at a distance, when racing rapidly along, as if they had merely hooked on a pair of additional legs; those of the rider being scarcely raised a foot off the ground. How would a regiment of cavalry look, mounted, or lowered rather, on these stout little chargers?"

A gentleman, some time ago, was presented with one of these handsome little animals, which was no less docile and elegant, and measured only seven hands in height. The gentleman was anxious to convey his present home as speedily as possible; but, being at a considerable distance, he was at a loss how to do so most easily. The friend who presented him said "Can you not carry him in your chaise?" He made the experiment, and the sheltic was lifted into the bottom of the gig, and covered up with the apron, and some bits of bread were given him to keep him quiet: he lay quite peaceably till the gentleman reached his destination; thus exhibiting the novel spectacle of a horse riding in a gig.



PUFFIN.

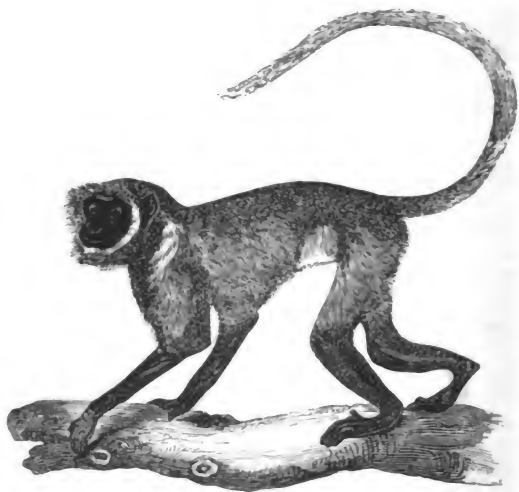
PUFFIN.

IN the genus to which the puffin belongs the bill is short, and nearly as deep as long. The present species has the crown of the head, the back, and a collar round the neck, black; the sides of the head, grey; the bill, which is deeply furrowed, bluish grey at the base, the middle being rich orange red, which turns into fine red at the tip; the legs are orange red. The length of the bird is about one foot one inch.

In its general form and habits the puffin bears a resemblance to the guillemot and the razor-bill. It breeds in cliffs, making use of rabbit-holes, if there are any; if not, it makes a burrow for itself. The puffins "commence this operation about the first week of May, and the hole is generally excavated to the depth of three feet, often in a curving direction, and occasionally with two entrances. When engaged in digging, which is principally performed by the males, they are sometimes so intent upon their work, as to admit of being taken by the hand; and the same may also be done during incubation. At this period I have frequently obtained specimens by thrusting my arm into the burrow, though at the risk of receiving a bite from the powerful sharp-edged bill of the old bird. At the farther end of this hole the single egg is deposited, which in size nearly equals that of a pullet. The young are at first covered with blackish down, and in about a month are sufficiently plumed to follow their parents to sea.

The puffin is an admirable diver: it may be often seen perched on the ledge of a bold precipice, peering

with its keen eyes into the glassy water below: suddenly it throws itself headlong into the abyss, cleaving the waves, which sparkle as they close over it. Soon, however, it re-appears, laden with a row of sprats, its favourite food, which hang from the bill, their heads being secured between its mandibles; and now taking a curved sweep upwards, it bears them to its young."



ENTELLUS MONKEY.

ENTELLUS MONKEY.

THIS is one of the very numerous tribe of monkeys; it is a native of India and the adjacent islands. The general colour of the animal is light yellow, more or less inclining to grey; the face is black.

"The entellus, or Hoonuman is held sacred in some parts of India, but not by the people of Mahratta, where it is called makur: it occurs in large troops in the woods of the western Ghauts. In lower Bengal, where it makes its appearance towards the latter end of the winter, (for it would seem that it migrates from the upper to the lower provinces, and 'vice versâ' in this part of India;) the pious Brahmins venerate it, supply it with food, and zealously endeavour to prevent its molestation by Europeans. According to Dr. Fryer and others, these monkeys, in Malabar, towards Ceylon, and at the Straits of Balagat, are deified. At Dhuboy, see "Forbes's Oriental Memoirs," they are, if not worshipped, protected, from motives of humanity to the brute creation, and a general belief in metempsychosis.

According to the latter author, there are as many monkeys as human inhabitants in Dhuboy, and the roofs and upper parts of the houses seem entirely appropriated to their accommodation. To strangers they are unbearably annoying. Once a friend of Mr. Forbes, on a shooting excursion, killed a female monkey under a tree, and carried it to his tent, which was soon surrounded by forty or fifty of the tribe, who made a great noise, and with menacing gestures advanced towards it. On presenting his fowling-piece, they hesitated, and appeared

resolute. But one, which, from his age and station in the van appeared to be at the head of the troop, stood his ground, chattering and menacing in a furious manner, nor could any efforts less cruel than firing drive him off. He at length approached the tent door, and by every token of grief and supplication seemed to beg the body of the deceased, which was then given to him; with every token of sorrow he took it up in his arms, embraced it with conjugal affection, and carried it to his expecting comrades. The artless behaviour of this poor animal wrought so powerfully on the sportsmen, that they resolved never to level a gun again at one of the monkey race."

Monkeys subsist principally on fruits, the buds of trees, or succulent roots and plants. They are all fond of sweets, and shew a particular predilection for the pleasant juice of the palm tree and the sugar cane; but when it happens that these fail, or that a different kind of food becomes more agreeable, they have recourse to insects and worms; and sometimes such as inhabit the coasts descend to the sea-shores, where they feast on oysters and crabs. The crafty manner in which they obtain these is thus effected:—The oysters of the tropical climates being larger than ours, the monkeys, when they reach the sea-side, pick up stones, and thrust them between the opening shells, which, being thus prevented from closing, the cunning animals then eat the fish at their ease. In order to attract the crabs, they put their tails to the holes in which they have taken refuge, and when the crabs have fastened on the lure, the monkeys suddenly withdraw their tails, and thus drag their prey on shore.



HONEY-EATER.

WARTY-FACED HONEY-EATER.

THIS beautiful bird, termed the mock regent bird by the colonists of New South Wales, is one of the most lively-coloured of the honey-eaters. Its plumage is rich yellow and deep black, most agreeably varied.

According to Mr. Gould, "it is a stationary species, and enjoys a range extending from South Australia to New South Wales." "Although it is very generally distributed, its presence appears to be dependent on the state of the blue gum tree, upon whose blossoms it mainly depends for subsistence; it is consequently only to be found in any particular locality during the season that those trees are in full bloom. It generally resorts to the loftiest and most fully-flowered tree, where it reigns supreme, buffetting and driving every other bird away from its immediate neighbourhood; it is, in fact, the most pugnacious bird I ever saw, evincing particular hostility to the smaller honey-eaters, and even to others of its own species that may venture to approach the trees upon which two or three have taken their station. I met with it in great abundance among the bushes of New South Wales, and also found it breeding in the low apple tree flats of the upper Hunter. I have occasionally seen flocks of from fifty to one hundred in number, passing from tree to tree, as if engaged in a partial migration from one part of the country to another, probably in search of a more abundant supply of food. Its note is a peculiar loud whistle, not entirely devoid of melody.

The nest, which is usually constructed on the over-

hanging branch of a blue gum tree, is round, cup-shaped, five inches in diameter, and composed of fine grasses, lined with a little wool and hair. The eggs are two in number, of a deep yellowish buff, marked all over with indistinct spots and irregular blotches of chesnut red and dull purplish grey, particularly at the larger end, where they frequently form a zone.

This bird is about the size of the common thrush.



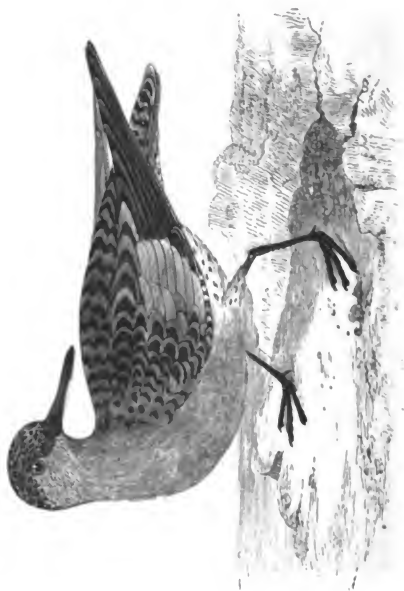
SLOTH.

THE sloths are creatures of very extraordinary appearance, as well as organization. They live altogether in trees, and are solely adapted for such a life. Buffon, the French naturalist, spoke of these animals as if they must necessarily pass a most melancholy existence, but his ideas were altogether fanciful, and beyond all doubt totally erroneous. We may feel sure that the all-merciful and all-wise providence of God has allotted to it a share of happiness commensurate with that which He has apportioned to all His other creatures.

Professor Owen observes of the sloths, that they bear some degree of resemblance, in their internal configuration, to the lizards. Professor Buckland, in an interesting paper on these animals, in the "Linnæan Transactions," remarks that Mr. Burchell, the celebrated traveller, noticed that "his captive sloths assumed during sleep a position of perfect ease and safety on the fork of a tree; their arms embracing the trunk, their backs resting on the angle of a branch, and their heads reclining on their own bosoms. The animal is thus rolled up nearly in the form of a ball; the entire vertebral column, including the neck, assumes a nearly circular curve, and not only is the weight of the whole body maintained in an attitude of ease and safety, but the head is supported between the arms and chest, and the face lies buried in the long wool which covers those parts, and is thus protected during sleep from the myriads of insects which would otherwise attack it."

"Unfitted then for the ground, along which he can

only drag himself by applying the claws of the fore feet to any rough projection within reach, the sloth is eminently qualified for the branches of the forest, and that rather for their upper than their under surface; clinging to them, he rests and travels suspended, yet in perfect security; here his awkwardness disappears, and he traverses the branches, or passes from tree to tree in the dense forest with considerable celerity, either in quest of food, or in order to escape his enemies."



SANDPIPER.

THE family of the sandpipers is a very numerous one: they are all inhabitants of the sea shore, the borders of lakes, rivers, swamps, and marshy places. They feed on the various insects which are to be found in such situations; and for procuring them they are furnished with a long bill, which they thrust into the soft earth.

The common sandpiper is greenish brown on the back; and white on the breast. Its length is seven inches and a half.

A writer from the neighbourhood of Clitheroe in Lancashire, says, "The common sandpiper breeds with us, and I this year started an old one from her nest at the root of a fir tree. She screamed out, and rolled about in such a manner, and seemed so completely disabled, that, although perfectly aware that her intention was to allure me from her nest, I could not resist the inclination to pursue her, and, in consequence, I had great difficulty in finding the nest again. It was built of a few dried leaves of the Weymouth pine, and contained three young ones, just hatched, and an egg, through the shell of which the bill of the young chick was just making its way; yet, young as they were, on my taking out the egg to examine it, the little things, which could not have been out of their shells more than an hour or two, set off out of the nest with as much celerity as if they had been running about a fortnight. As I thought the old one would abandon the egg if the young ones left the nest, I caught them

again, and covering them with my hand for some time they settled down again: next day all four had disappeared."

The authors of the "Catalogue of the Norfolk and Suffolk Birds," say, "Some years since, we saw a sandpiper flying across a river, attacked by a hawk, when it instantly dived, and remained under water until its enemy disappeared: it then emerged and joined its companions. This bird, when flushed, sometimes utters a note resembling, as near as possible, that of the kingfisher."



CHATI.

THE chati is a native of Paraguay and other parts of South America. The following is Frederick Cuvier's description of one which was kept in the menagerie of Paris:—"About a third larger than the domestic cat; length, exclusive of the tail, rather more than two feet; tail, eleven inches; height, to the middle of the back, about one foot two inches. Ground colour of fur on the upper parts, pale yellowish; on the lower, pure white; at the roots, dull grey, and very thick and close. Body covered with irregular dark patches; those upon the back entirely black, and disposed longitudinally in four rows; those upon the sides surrounded with black, with the centres of a clear fawn, arranged in nearly five rows; spots upon the lower parts of the body, where the ground colour of the fur is white, full, and arranged in two lines composed of six or seven patches on each side. Limbs covered with nearly round spots of smaller dimensions; on the four legs, near the body, two transverse bands; on the throat a sort of half collar, and on the under jaw two crescent-shaped spots. Behind each eye, two bands about two inches long, terminating opposite the ear.

Forehead bordered by two lines, between which are numerous spots, and at their origin, a blackish mark from which the whiskers spring. Outside of the ear, black, with a white spot upon the small lobe. Base of the tail spotted with small blotches, which, towards the end, run in half rings, which are broadest on the upper surface. The pupil of the eye of the chati is round;

in other parts of its formation, and in its motions, it is said to resemble the common cat; it also utters a similar cry, only that it is a little harsher and more lengthened.

This animal was extremely gentle and familiar, so much so indeed that, if persons to whom it was attached passed its cage, or did not approach it, it would express its discontent, or solicit their attention by a short cry; and when caressed it manifested great delight."



MOCKING BIRD.

MOCKING BIRD.

THIS curious bird, unrivalled, if report be true, in its powers of voice, is about nine inches and a half long. It inhabits most parts of America and the West Indies. Its general colour is a dark greyish brown. The eye is yellow, inclining to pale gold-colour; the bill and the legs are black. The plumage of the female is duller than that of the male.

"The mocking bird loses little of the power and energy of his song by confinement. In his domesticated state, when he commences his career of song, it is impossible to stand by uninterested. He whistles for the dog; Cæsar starts up, wags his tail, and runs to meet his master. He squeaks out like a hurt chicken, and the hen hurries about with hanging wings and bristled feathers, chuckling to protect its injured brood. The barking of the dog, the mewing of the cat, the creaking of a passing wheelbarrow, are followed with great truth and rapidity. He repeats the tune taught him by his master, though of considerable length, fully and faithfully; he runs over the quaverings of the canary, and the clear whistlings of the virginian nightingale, or red-bird, with such superior execution and effect, that the mortified songsters feel their own inferiority, and become altogether silent, while he seems to triumph in their defeat by redoubling his exertions.

This excessive fondness of variety, however, in the opinion of some injures his song. His elevated imitations of the brown thrush are frequently interrupted by the crowing of cocks; and the warblings of the blue-bird,

which he exquisitely manages, are mingled with the screaming of swallows, or the cackling of hens. Amidst the simple melody of the robin, one is suddenly surprised by the shrill reiterations of the whip-poor-will; while the notes of the kill-deer, blue jay, martin, baltimore, and twenty others, succeed, with such imposing reality, that the auditors look round for the originals, and with astonishment discover that the sole performer in this singular concert is the admirable bird now before us.

During this exhibition of his powers, he spreads his wings, expands his tail, and throws himself around the cage in all the ecstasies of enthusiasm, seeming not only to sing but to dance, keeping time to the measure of his own music. Both in his native and domesticated state during the stillness of the night, as soon as the moon rises, he begins his delightful solo, making the whole neighbourhood resound with his imitable medley."



VULPINE PHALANGER.

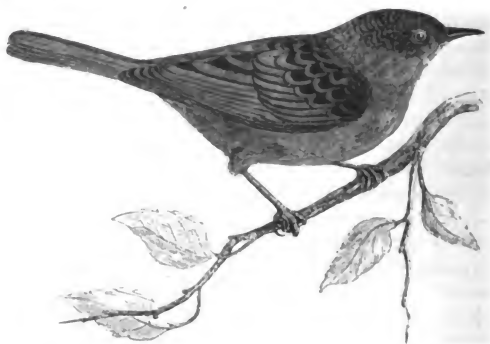
THE phalangers, so called from their having the second and third toes of the hinder foot united, are inhabitants of New South Wales, and the adjacent Islands. They are nocturnal in their habits, remaining concealed during the day on the branches, or in the hollows of trees; at twilight they quit their hiding-places, and climb amongst the branches to seek their food. Generally speaking, they are not very active in their movements; but among the smaller species, are some to which this remark will by no means apply, since they are extremely agile.

The vulpine phalanger is about equal in size to the common cat; its ears are long, and somewhat pointed; the tail is about equal to the body in length. The fur is long, loose, and moderately soft to the touch; its general colour is grey; on the back the fur assumes a deeper hue than on the sides of the body. The muzzle and chin are blackish. The ears are almost naked within, and of a brownish pink colour. The throat, as well as the whole under parts of the body and inner sides of the limbs, are of a pale buff-yellow tint.

Mr. Waterhouse, in describing this animal, says, "Numerous specimens have from time to time formed part of the Zoological Society's living collection, and, from my own observations, they appeared to be by no means intelligent animals. During the day-time they were usually asleep, but towards the evening they became active, and on the alert for their food, consisting of bread and milk, and various vegetable substances, including fruits. Whatever eatable was given to them

was taken by, and held between the hands in the same manner as a squirrel holds a nut. Occasionally a dead bird was given to these animals, which were evidently fond of such food, and most particularly the brain, which was the first part consumed."

One of the smallest of this species, the beautiful pigmy phalanger, is rather smaller than the common dormouse; its colour is usually of a delicate rusty brown. According to Mr. Gould, it is abundantly and very generally distributed over the colony of Swan River. Its habits being strictly nocturnal, it secretes itself during the day in the hollows of trees, and at night leaves its retreat for the flowering branches of low shrubby trees. At that time it is said to be very active, and when kept in confinement will leap from side to side of its cage in chase of insects, of which it is exceedingly fond. The sexes present but little difference either in size or colouring; in some specimens the under parts of the body are slightly tinted with buff colour.



HEDGE SPARROW.

HEDGE SPARROW.

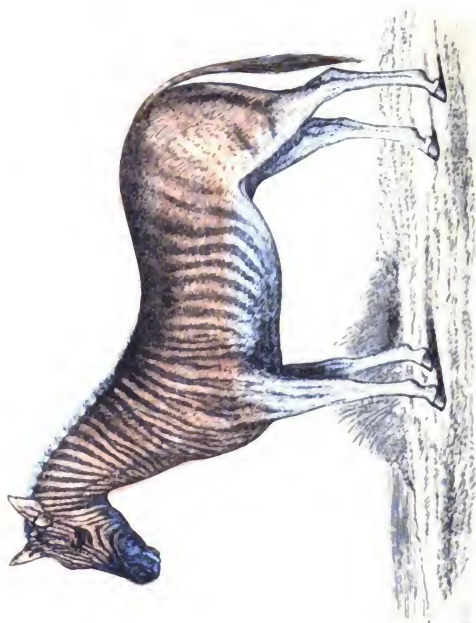
THE hedge sparrow, or dunnoek; erroneously called by the former name, for it is not a sparrow, but belongs to the family of the warblers; is a very well-known species, being one of the commonest of our native birds.

Its length is about five inches and three-quarters; the bill is dusky; the eye hazel; the head and neck brown, mixed with ash-colour; back and wing coverts, darker brown, edged with rufous brown; throat and breast, dull ash-colour, sides, tawny brown. The female has less of the ash-colour about the head and breast.

Rennie says in his "Architecture of Birds," "The nest is usually built rather loose, of green moss, upon a foundation of a few dry twigs or roots; the hair-work within is sometimes of considerable thickness, though most usually so thin as not to cover the moss; but in both cases the hairs are collected and interwoven into the structure singly, and always bent carefully, so as to lie smooth in the circular cut of the nest. It may be remarked, also, that none of the ends are projecting, but uniformly pushed in amongst the moss of the exterior. Whether the bird uses any gluten, as a cement, to retain the hairs in their proper places, I have not succeeded in distinctly ascertaining; though I think it highly probable, if this is not done, that the hairs are moistened to make them wind, since otherwise it would not be easy to account for the neatness of the work, and for the remarkable circumstance, that when the exterior framework of moss and twigs is removed, there remains a circular piece of hair-cloth, (if I may use the term,) in

some nests, thin indeed, but in others, thick and closely woven.

The hedge sparrow is found in all parts of England; and has a pleasing song, which it begins with the new year, if the weather is mild. It breeds early, making a nest in March, composed of green moss and lined with hair, which is placed in some low evergreen shrub, thick brush, or cut hedge; frequently in faggot piles. The eggs are four or five in number, blue; their weight about twenty-eight grains."



QUAGGA.

THIS animal, which used to be confounded with the zebra, is now acknowledged to be quite a distinct species. It inhabits the same parts of Africa as the zebra; but is always found in separate herds, never associating with it. It is about the same size as the zebra, but less elegant in its shape and marks, and of a much more docile nature. The head and neck of the quagga are dark blackish brown; the body of a clear brown, becoming paler beneath, the under part being nearly white, as well as the legs. The head and neck are striped with greyish white; there are ten bands in the neck; the mane is blackish, short, much thicker than that of the zebra, commencing on the forehead, and is, like the zebra's, striped; a black band runs along the back to the tail, which is like that of a cow, with a dark brown or black tuft of hair at its extremity. The quagga in its form, proportions, lightness of figure, and smallness of head and ears, bears a greater resemblance to the horse than the zebra.

Quaggas associate in herds, frequently to the number of a hundred, in the most solitary regions of Southern Africa. Delalande observed great flocks of them at the mouth of the Grootvis river; which, during the night, would approach near to his tent. The cry of this animal bears a strong resemblance to the barking of a dog. He is very easily tamed, and rendered subservient to domestic purposes. It is a matter of surprise that the quagga has not been made more useful to man; as its constitution is fitted for the hottest climate, so that it

would be extremely valuable in those burning regions, where the heat destroys the capabilities of the horse.

In a wild state the quagga is possessed of great natural courage; for, according to the report of travellers, he effectually repels the attacks of wolves and hyænas, with which his native country abounds. The natural pliability of his disposition, his great activity, and physical strength, peculiarly fit him for the service of man; and when these become more generally known, there is no doubt he will be added to our list of domestic animals.



LAPWING.

LAPWING.

THE lapwing, when inspected nearly, will be seen to be a very handsome bird. The feathers on the back of the head are elongated into a crest, the breast is white, and the back is of an elegant brownish green colour, glossed with purple blue. The quill feathers of the wings are black, with white spots on the tips of the first four; the inner half of the tail is white, the end black; the legs, dull orange; the bill, black; the eyes, hazel.

The lapwing, or peewit, as it is very commonly called from the resemblance of its note to that word, is a very common bird in most parts of the kingdom, and is seen in the autumn in large flocks. In the summer, when it has young, it may be approached pretty nearly, but it always tries to draw off attention by feigning lameness or inability to fly, so as to decoy any supposed enemy from its young.

The following interesting anecdote is related by M. Antoine of a lapwing which a clergyman kept in his garden. It lived chiefly upon insects, but as the winter drew on, these failed, and necessity compelled the poor bird to approach the house from which it had previously remained at a wary distance; and a servant hearing its feeble cry, as if it were asking charity, opened for it the door of the back kitchen. It did not venture far at first, but it became daily more familiar and emboldened as the cold increased, till at last it actually entered the kitchen, though already occupied by a dog and cat. By degrees it at length came to so good an

understanding with these animals, that it entered regularly at nightfall, and established itself at the chimney corner, where it remained snugly beside them for the night; but as soon as the warmth of spring returned, it preferred roosting in the garden, though it resumed its place at the chimney corner the ensuing winter. Instead of being afraid of its two old acquaintances, the dog and the cat, it now treated them as inferiors, and arrogated to itself the place which it had previously obtained by humble solicitation. This interesting pet was at last choked by a bone which it had incautiously swallowed.



MUSE DEER

MUSK DEER.

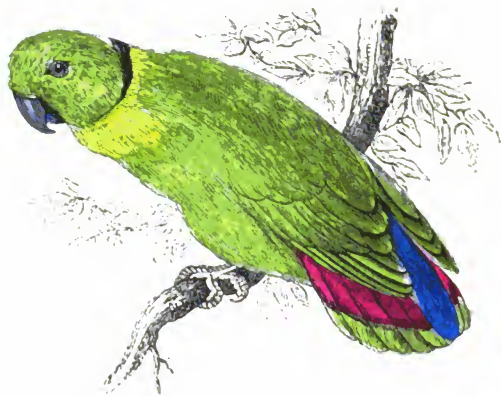
THE musk deer inhabits the great range of mountains which bound the north of India, and branch out into Siberia, Thibet, and China. It is chiefly remarkable for the strong scent of musk which exhales from it, and a drug is procured from the animal which was formerly held in high repute, and even still holds a place in the 'materia medica.'

"In size the musk deer is about equal to our European roebuck, standing two feet in height at the shoulders; the forehead is arched, the eyes large, the ears rather ample and very moveable; the tail is a mere rudiment, concealed by the long, harsh, and almost spine-like hair with which the animal is universally covered. The general contour is compact, and displays great vigour, the limbs being robust and well adapted for climbing and leaping among the rocks of the mountain ranges; the hoofs are strong, broad, and expanded, and the posterior rudimentary hoofs are so developed, as to touch with their points the surface on which the animal treads, so as to add to the security of its footing. The general colour of the musk deer is brown, washed with grey and pale yellow, each hair being tipped with ferruginous; obscure grey or whitish marks often occur on the sides, especially in immature individuals: the shoulders and limbs are of a deeper tint than the body.

In 1772, a male of this species was living in the park of Mons. de la Brilliére, at Versailles, in France, and Daubenton, who published a description of it informs

us that the odour it exhaled, and which was carried with the wind, was quite sufficient to guide to the spot where the animal was kept enclosed. 'When I first saw it,' he adds, 'I recognised much resemblance in its figure and attitude to those of the roe, the gazelle, and the chevrotain. No animal of this (the deer) tribe has more activity, suppleness, and vivacity in its movements.' It was extremely timid and wild, but like all the species of the peculiar group to which it belongs, it is gentle and inoffensive.

The chevrotains, as we well know, may be rendered very tame, and it is probable that if the musk deer were taken young, it might be easily domesticated, since the former animals are shy and timid in the extreme while in a state of natural freedom, but soon gain confidence and have even bred in captivity in our uncongenial climate."



LOVE BIRD.

LOVE BIRD.

THE love birds form part of a group of most beautiful little parrakeets—the most diminutive of their race, with short rounded tails: they are natives of the torrid zone. The common love bird from Guinea is well known, being often kept in cages in pairs; it is very interesting to witness the attention which a pair of these birds pay to each other; caressing each other, arranging each other's plumage, and by numberless little acts of kindness evidencing their mutual attachment. They usually sleep suspended with the head downwards, clinging by one foot alone.

Parrots are, for the most part tropical birds, and in their native climates are the most numerous of the feathered tribes. Montgomery says,

“The parrots swung like blossoms on the trees.”

They are described as flying in large flocks in South America, with loud screams, and all kinds of evolutions in the air: some of them are shot and eaten by travellers. Prince Maximilian describes the cold season as causing the forest birds to come down in great numbers from the interior to the coast of Brazil, and thus enabling the hunters to shoot abundance of parrots for food. “The flesh of the parrot,” observes the prince, “makes very strong broth, but I nowhere found any confirmation of what Southey says, that it is used in medicine.”

The flight of the parrots is rapid, elegant, and vigorous, capable of being long sustained, and many of the species

are in the habit of describing circles and other aerial evolutions, previous to their alighting upon the trees which contain their food. Thus Audubon, in his account of the Carolina parrakeet, says, "Their flight is rapid, straight, and continued through the forests, or over fields and rivers, and is accompanied by inclinations of the body, which enables the observer to see alternately their upper and under parts. They deviate from a direct course only when impediments occur, such as the trunks of trees, or houses, in which case they glance aside in a very graceful manner, as much as may be necessary. A general cry is kept up by the party, and it is seldom that one of these birds is on the wing for ever so short a space, without uttering its cry. On reaching a spot which affords a supply of food, instead of alighting at once, as many birds do, the parrakeets take a good survey of the neighbourhood, passing over it in circles of great extent, first above the trees, and then gradually lowering, until they almost touch the ground, when, suddenly re-ascending, they all settle on the tree that bears the fruit of which they are in quest, or on one close to the field in which they expect to regale themselves."

The places selected for hatching their eggs, and rearing their young, are the hollows of decayed trees; they make little or no nest, but deposit their eggs, which, according to the species, vary from two to five or six in number, upon the bare rotten wood. In these hollows, it is said, they also frequently roost during the night.



CARACAL.

THE caracal, which belongs to the hot parts of Asia and Africa, is the lynx of the ancients. The animal known to us by that name was unknown to the Greeks; and the Romans, who knew it, called it by a different name. It derives its modern name from two Turkish words, which mean 'black ear.' It is widely distributed, being found in Persia, India, Barbary, Nubia, Egypt, and the whole of Africa, to Caffraria, Turkey, and Arabia.

The general colour of the body is a pale reddish brown, with a vinous tinge; the lower parts are paler. Two spots of pure white are near each eye, one on the inner side and above the eye, the other beneath its outer angle. The edges of the upper lip, the chin, and lower lip, are white, as are the insides of the limbs. The whiskers rise from a series of black lines. The ears are long and tapering, and are surmounted by a pencil of long black hairs; their colour externally is black. The tail reaches only to the hock joint. Temminck gives the measurements as following:—Length, two feet ten inches, of which the tail measures ten; average height, about fourteen inches. The eyes of the caracal have a marked nocturnal character, and are large, bright, and scowling in their expression. The limbs are extremely muscular, and its whole contour denotes great activity.

The caracal feeds on small quadrupeds and birds, the latter of which it pursues even to the tops of the trees. It is said to follow the lion and other large beasts of prey for the purpose of feeding on what they leave.

The caracal leaps upon its victim, and holds it with

remarkable tenacity, as was noticed by Ælian. Ossian also alludes to its mode of springing upon hares, deer, etc. According to Temminck, they are in the habit of hunting in packs, like wild dogs, and of running down their prey: most probably they creep towards it, like the chetah, and spring suddenly upon it. Pennant, quoting Thevanot, states that they are often brought up, and used in the chase of lesser quadrupeds, and the larger sort of birds, as cranes, pelicans, peacocks, etc.; and that when they seize their prey they hold it fast with their mouth, and lie motionless on it. He also adds, on the authority of Hyde, that the Arabians, who call it *snak-el-ard*, affirm that it hunts like the panther, jumps up at cranes as they fly, and covers its steps when hunting."



VIREO FLAVIFRONS

WHEATEAR.

THIS plain-coloured, but pretty little bird, is to be seen in summer on the open downs, in various parts of the country. Its length is five inches and a half; the bill is black, the eyes dark brown; from the base of the bill a black streak extends to the eye, behind which it increases in width; above this is a line of white. The breast is pale buff-colour, with a tinge of red, the legs and feet are black; the tail coverts and part of the tail are white, the rest of the tail is black. The back of the head, the neck behind, and the back, are bluish grey.

“The wheatear breeds under shelter of a turf or clod in newly-ploughed lands, or under stones, and sometimes in old rabbit burrows. The nest is constructed with great care, of dry grass or moss, mixed with wool, lined with feathers, and defended by a sort of covert fixed to the stone or clod under which it is formed. The female lays five or six blue eggs, the larger end encompassed with a circle of a somewhat deeper hue.

This bird visits us about the middle of March, and from that time till May is seen to arrive. It frequents new-tilled grounds, and never fails to follow the plough, in search of insects and small worms, which are its principal food.

In some parts of England great numbers are taken in snares made of horse-hair, placed beneath a turf; near two thousand dozen are said to have been taken annually, and sold at sixpence per dozen. They leave us in August or September, and about that time are seen

in great numbers by the sea shore, where, probably, they subsist some little time before they take their departure. They are extended over a large portion of the globe, even as far as the southern parts of Asia."



BLACK SQUIRREL.

BLACK SQUIRREL.

THE black squirrel is also known by the name of the North American, or grey squirrel. In length, including the extent of the tail, which is nearly twice as long as the body, it measures two feet and three-quarters. There are several varieties of the species, two of which appear to be very permanent, giving rise to the two names of grey and black, by which this pretty little animal is distinguished.

Mr. Fennell gives the following account of it:—"The species now under notice appears to be the most active and sprightly of any existing in the Atlantic States. It rises with the sun, and continues industriously engaged in search of food during four or five hours in the morning, scratching among leaves, running over logs, ascending trees, and playfully coursing from limb to limb, often making almost incredible leaps from the higher branches of one tree to another. In the middle of the day it retires for a few hours to its nest, resuming its active labours and amusements in the afternoon, and continuing them without intermission till sunset. The chesnut, beech, oak, and maple afford it food, but it appears to prefer the shell-bark, and the various species of hickory to any other kind of food. Even when the nuts are so green as to afford scarcely any nourishment, it gnaws off the thick epidermis, which drops to the ground like rain, and then, with its lower incisor teeth, makes a small linear opening in the thinnest part of the shell, immediately over the kernel. In an incredibly short space of time the nut is cut longitudinally on its

four sides, and the whole kernel secured, leaving the portions of the hard shell untouched. Not satisfied with this kind of food, it commits great depredations on the green corn and young wheat, thus rendering itself obnoxious to the farmer.

In Pennsylvania a law existed offering three pence for every squirrel destroyed, and in the year 1749, the sum of eight thousand pounds was paid out of the treasury, in premiums for their destruction. The inhabitants of several of the northern and western states assemble together on an appointed day to have a squirrel hunt. Arranging themselves in two opposite parties, each under a leader, they range the forest in every direction, and before evening these gunners bag an almost incredible number of squirrels. At the evening rendezvous, the party who produces the less number bears the expense of a bountiful supper, a penalty which stimulates the gunners to the greatest activity in destroying them.



BLACKBIRD

JACKDAW.

THE jackdaw is a very common and well-known bird. It is of a general black colour, glossed with blue, the back part of the head and neck a fine grey, the bill black, the eye light grey, the forehead black, the breast dusky black, the legs black.

Several varieties of this species are given by different authors; some entirely black, without the grey on the head and neck; others quite white, or mixed black and white. It is found in Denmark, France, and Germany, also in Russia, and the western parts of Siberia; but in most of these places it is found to be migratory.

This very common bird frequents old towers, ruined buildings, and high cliffs, where it builds, as well as in holes of trees. The nest is made of sticks, and lined with wool and other soft materials; the eggs are five or six in number, bluish, spotted with black.

These birds are gregarious, and frequently flock together with rooks, feeding in the same manner on grain and insects; they are fond of cherries, and will devour carrion in severe weather. They are seen frequently to perch on the backs of sheep, not only to rob the animals of their wool to line its nest, but also to pick out the insects with which it is infested. They are very docile, tractable, and mischievous birds, easily tamed, and may be taught to talk. Some instances are mentioned of their breeding in rabbit-holes.

At Cambridge, says Mr. J. Denson, there is good accommodation for jackdaws in the abundant receptacles for their nests which the various colleges and churches

supply, and jackdaws are numerous at Cambridge. The Botanic Garden there has three of its four sides enclosed by thickly built parts of the town, and has five parish churches and five colleges within a short flight of it. The jackdaws inhabiting these and other churches and colleges, had discovered that the wooden labels placed near the plants, whose names they bore, in the Botanic Garden, would serve well enough for their nests, instead of twigs from trees, and that they possessed the greater convenience of being prepared ready for use, and placed very near home. I cannot give a probable idea of the number of labels which the jackdaws annually removed; but from the shaft of one chimney in Free School Lane, which was close beside the Botanic Garden, no less than eighteen dozen of these labels were taken out and brought to Mr. Arthur Briggs, the curator of the Botanic Gardens, who received and counted them.



CAVY.

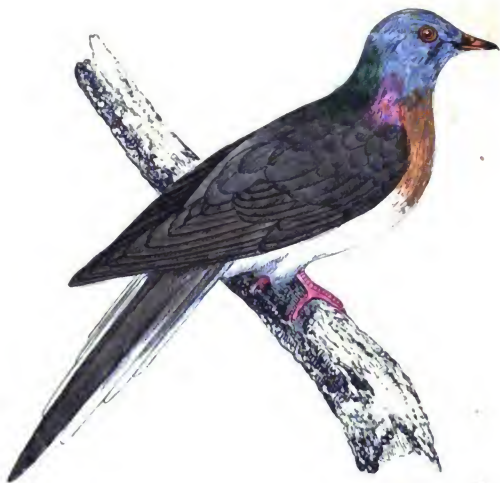
THE proper name of this pretty little animal is the Guiana pig, or rather should be the Guiana cavy, for it is not a pig at all. It seems to be considered as tolerably certain that it has originally been derived from the perea which inhabits the woods of Brazil, Paraguay, Guiana, and other parts of the southern continent of America, from the latter of which it has obtained the name of Guiana pig, which has been corrupted into Guinea pig—Guinea being a country in the central part of the western coast of Africa.

“Although this animal, doubtless a South American, has been very generally domesticated from an early period; the stock from whence the breed was derived is not known, nor is it recognised in any wild species now found in that part of the world.

The length of this animal, when it extends its body, is nearly eleven inches. It has no tail. The distribution of its spots, black and brown on a white ground, varies in different individuals. They are pretty, tame, harmless little creatures, and very careful of keeping a clean fur. They feed on various plants; but it is said that if they, or even rabbits, be given the leaves, stalks, and pods of the maize, or Indian corn, they will touch no other food while a particle of this remains. They drink by lapping. They have several litters in the year, each litter consisting of from six to eight, or even twelve young.”

There are several species of Guinea pig, so called. The one now before us, when domesticated in this

country, bears a good deal of resemblance to the rabbit, but is not quite so large; it is marked all over with irregular patches of black, white, and orange. The ears are round and almost bare of fur; the feet are short.



PASSENGER PIGEON.

PASSENGER PIGEON.

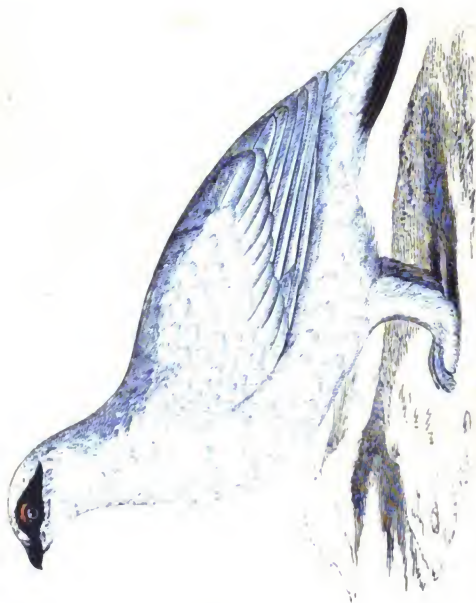
THIS species of bird is common in North America, but one specimen has been obtained in England, and three others seen; the former on the 31st. of December, 1825, in the parish of Monymenal, in Fifeshire, and the latter in the beginning of April, 1833, in the woods of Littleton Common, in Middlesex.

The following is the description:—All the upper parts, from the head to the tip of the tail, are bluish ash-coloured; the two middle tail feathers are black, and much elongated; the next are grey, and shorter as they approach the outer feathers, which are white on the outer webs and tips. The tail feathers being white at their base, with a black spot, produce a fine boundary to the white under tail coverts; the upper tail coverts are very much lengthened. On the sides of the neck the pigeon has the usual markings, or metallic scaled feathers, common to its family, which joins the very lovely salmon-colour of the throat, neck, sides, and breast; and this salmon-colour decreases in intensity as it descends, and fades off into white. The sides have a tinge of grey; the bill is black, the iris fire-coloured, and the legs are between lake and carmine red.

The celebrated naturalist, M. Temminck, writes as follows of this bird:—"When we consider the habits of this species, particularly in respect of its wandering propensities, and its existence in all the northern parts of America, even those nearest the north pole, it is not surprising that some stragglers should be found from time to time within the limits of Europe, and that they should

have been captured in our northern countries, to which they have been driven by gales of wind. Several specimens are cited as having been taken in England, Norway, and Russia. Its range extends from the Gulf of Mexico, over the United States to Canada, and as far as Hudson's and Baffin's Bays.

Its principal food consists of the nuts of the red beech. They live in companies, often of many thousands, their numbers covering a space of many miles in extent; and their place of repose is marked by the devastation they occasion amongst the trees. They breed in such large companies, that from sixty to a hundred nests are placed in a single tree. The nests are composed of small sticks, and appear to contain only a single white egg each."



PTARMIGAN.

PTARMIGAN.

IN the genus of the grouse, to which this neatly-plumaged bird belongs, the legs and toes are completely covered with feathers to the very claws, and this warm covering becomes thicker in winter, when its use to the bird is greater; living, as it does, among the snow, to which its white colour assimilates.

“One of the most remarkable facts connected with the history of this species is its change from a rich and spotted livery, its summer dress, to one of pure white. In spring, for example, the plumage is varied with black and deep reddish yellow, the quill feathers being white with black shafts. Towards autumn the yellow gives place to greyish white, and the black spots become irregularly broken, till at last they disappear, the plumage whitening to the purity of snow; at the same time it acquires greater fullness, and the legs and feet are so densely clad, as to resemble those of a hare. As spring returns, the ptarmigan begins to lose the pure white of its plumage, and regain its summer dress.

Of the number of ptarmigans imported during the latter part of the winter and early in the spring from Norway, Sweden, etc., to the London market, few persons have any idea. ‘On one occasion,’ says Mr. Yarrell, ‘late in the spring of 1839, one party shipped six thousand ptarmigans for London, two thousand for Hull, and two thousand for Liverpool; and at the end of February, or very early in March, of the year 1840, one salesman in Leadenhall market received fifteen thousand ptarmigans that had been consigned to him;

and during the same week another salesman received seven hundred capercaillies, and five hundred and sixty black grouse.' From Drannen, in Norway, in 1839, two thousand dozen ptarmigans were exported in one ship to London. Sixty thousand have been killed in a single parish, during the course of the winter. The total of these birds destroyed throughout Norway and Sweden every season we do not know, but it must be enormous."



